DOCUMENT RESUME

ED 133 273 SO 009 690

AUTHOR Senn, Peter R.
TITLE World of Work--Economic Education Project, 1974-1976. Final Evaluation.
SPONS AGENCY National Science Foundation, Washington, D.C.
PUB DATE 30 Sep 76
GRANT GW-8546, PES-75-01844
NOTE 112p.

EDRS PRICE MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS Cost Effectiveness; Course Content; Curriculum Development; Curriculum Evaluation; *Economic Education; Economics; *Educational Objectives; Elementary Secondary Education; Evaluation Methods; *Experimental Curriculum; Federal Aid; Program Descriptions; *Program Evaluation; *Research Needs; Social Studies; Teacher Education; Teaching Procedures
IDENTIFIERS *World of Work Economic Education Project

ABSTRACT

This evaluation of a federally funded economics curriculum project reviews acquisition of learning outcomes, success of content and teaching methods, perception of curriculum change, and facilitation of decision making. Over 10,000 elementary and secondary school students in Illinois were exposed to economics through the specially developed World of Work Economics Education curriculum (WOWEE). The content focused on 10 concepts including scarcity, work satisfaction, productivity and labor, and unemployment. Teachers sharpened their own skills in economics by studying in a university setting. Specific sections of the evaluation report assess learning objectives, instructional procedures, instructional and community settings, and the standard and basis for judging quality. A review of benefits, costs, and side effects of the program includes a report on how federal money was supplemented by contributions from universities, school districts, and state and private foundations. The program had widespread impact in Illinois. Articles published for professional audiences may promote national impact as well. Two areas for further research were identified: sex-related learning differentials in economics and measurement of affective learning in economic education. Appendices include the table of contents of a course text, a sample lesson planning packet, and regression results for cognitive evaluation. (AV)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

DEC 8 1976

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED133273

FINAL EVALUATION

WORLD OF WORK - ECONOMIC EDUCATION

PROJECT

1974 - 1976

BY

PETER R. SENN

SP009690

SUPPORTED BY NATIONAL SCIENCE FOUNDATION

GRANTS PES--75-01844

AND GW-8546

SEPTEMBER 30, 1976

TABLE OF CONTENTS

Summary

Preface

Introduction and Acknowledgements

Part I - Objectives of the Evaluation

A. The Audiences to be Served by the Evaluation

B. The Purposes and Emphasis of the Evaluation

C. Anticipated Decisions About the Program

D. The Rationale, Constraints, and Bias of the Evaluator

Part II - The Specifications of the Program Being Evaluated

A. The Educational Philosophy of the Program

B. Content and Subject Matter

C. The Learning Objectives and Staff Aims

D. Instructional Procedures, Tactics and Media

E. The Students - Specific Performance Objectives

F. The Instructional and Community Settings

G. The Standard and Basis for Judging Quality

H. A Short History of the Project

Part III - Program Outcome

A. Benefits

B. Costs

C. Side Effects and Unexpected Benefits

Part IV - Methods, Relationships and Indicators

A. Statistical Methods and Results

B. Other Methods

TABLE OF CONTENTS (cont.)

Part V - Judgments of Worth of the Program

A. Values of Outcomes From Different Points of View

B. The Relevance of Objectives To Needs

Appendices

Footnotes

SUMMARY

The achievements of the program were many, including the fact that over ten thousand elementary and high school students in Illinois were exposed to economics. In many cases, the children had no economics before. Most of the children learned measurable amounts of economics.

Over three hundred teachers had their skills in economics sharpened through the study of economics in a university setting.

Administrators from over forty school districts cooperated in infusing economics into the curriculum.

At least three important articles diffused the successful methods used in the program to a national audience of professionals.

At least two problem areas important for further research were uncovered. One concerns sex-related learning differentials in economics and the other an extremely unsatisfactory situation with respect to the measurement and interpretation of affective learning in economic education.

A large amount of classroom-ready materials was prepared and distributed.

The seed money approach of the National Science Foundation was successful. Many times the amount of the original grants were contributed by universities, school districts, teachers, state and private foundations.

The impact of the program in the State of Illinois was wide-spread and measurable. Some national impact is likely because of the publication of articles about the program. Although one cannot be certain, it is entirely possible that the research findings about affective learning and sex-related differentials in learning about economics will be of great importance.

PREFACE

This evaluation report was funded in part by funds set aside for that purpose, from the National Science Foundation grant PES--75-01844.

Other funds were also provided by the Illinois Council on Economic Education, Northern Illinois University Office for Economic Education, the Joint Council on Economic Education, McDonalds Corporation, and the Amoco Foundation.

INTRODUCTION AND ACKNOWLEDGEMENTS

"The educational profession is suffering from a completely inappropriate conception of the cost scale for educational research . . . When we are dealing with a teaching instrument such as a new curriculum or classroom procedure, with its extreme dependence upon highly variable operators and recipients we must expect considerably more expense. The social pay off is enormously more important, and this society can, in the long run, afford the expense." (Michael Scriven, *The Methodology of Evaluation*, Boulder, Col.: Social Science Education Consortium, 1966, p. 57) A complete evaluation of a lengthy, complicated and extensive project is very expensive. Note that the funds budgeted for the evaluation of this project are well under one percent of the total amount of money spent. This is not an uncommon situation, and according to some experts is the main reason that most project evaluations are inadequate.

This evaluation is much more extensive than the limited nature of the funding would imply. This is because of the committment of Dr. Michael MacDowell, Executive Director of the Illinois Council on Economic Education, and Dr. John Soper, Coordinator of the Northern Illinois University Office for Economic Education. They have supported the evaluation in every possible way without any interference or pressures of any kind to influence the outcome. Much of the credit for what may be valuable about the evaluation that follows is due to them.

William Stevens and Jean Intermaggio of the National Science Foundation were influential in establishing the financing and framework for the evaluation.

Faults of the evaluation are entirely the responsibility of the author.

PART I - OBJECTIVES OF THE EVALUATION

A. AUDIENCES TO BE SERVED BY THE EVALUATION

At least six difference audiences are served by an evaluation of this kind. They are:

1. The grant sponsors, governmental, business and non-profit organizations.
2. The teachers using the project materials, and other educators interested in using the program.
3. Administrators both of school districts and state offices charged with implementing mandated curriculum.
4. The faculty of the universities that trained the teachers and supervised the development of materials.
5. Curriculum supervisors and developers.
6. Educational researchers.

The needs and points of view of each of these groups differ. The organization of the report is intended to allow members of each group to find what interests them without too much difficulty. Details are found primarily in the appendices.

One of the problems in any kind of curriculum or project evaluation is that of checking upon the results. This is very rarely done. The usual procedure for whatever checking is done is simply to examine the methods used. While this is often useful, particularly in determining gross errors, it is not satisfactory from the scientific point of view which requires examination of the data and instruments. In order to allow others who might wish to check the evaluation in the future, an attempt will be made to preserve the entire project records.

B. THE PURPOSES AND EMPHASIS OF THE EVALUATION

This evaluation emphasizes six main purposes. Perhaps the most important of these refers to the quality of the material learned. What is required is a judgment about the question, namely "Is the new material better than the old material that it replaced?" Not necessarily in the order of importance are the five other purposes:

1. the measurement of student progress toward specific objectives;
2. an assessment of the content and procedures of instruction;
3. description and judgment of the different ways people see the curriculum change;
4. the facilitation of rational and continuing decision making; and
5. the search for cause and effect relationships which seek simple but enduring explanations of what works.

Each of these points, related to the audiences, is discussed in what follows.

C. ANTICIPATED DECISIONS ABOUT THE PROGRAM

The evaluation is expected to be helpful in making decisions about the future of the program. Perhaps the most important question is, "Should the program be continued?" Other questions relate to the changes that should be made in it, its financing, and its dissemination.

D. THE RATIONALE, CONSTRAINTS, AND BIAS OF THE EVALUATOR

The fundamental bias of the evaluator is in favor of improved economic education. A fundamental assumption is that a child's time in school is the child's most important scarce resource. If a child is spending time on one thing, he or she is obviously not spending it on another. Therefore, time spent learning economics concepts is not spent on learning something else.

The danger in this kind of approach lies in the assumption that learning economics is more important than whatever else would have been learned. This is

a very difficult assumption to support. Indeed it would be untenable if it were not for two significant facts. One is that the teachers using the program were virtually unanimous and enthusiastic in their view that it does replace weaker content with stronger content. The other, and perhaps most important fact is that it replaced unmeasurable outcomes with measureable outcomes. To the argument that the unmeasured outcomes were more important in some ways than the measured outcomes, there is only one question. "How do you know?" If the assumptions or methods given or implied by the answer to the question are less scientific than those of this project, then a reasonable conclusion is that this material is better used than alternative materials.

With respect to the content of the material the judgment of university faculty, the use of nationally normed tests, and the critical evaluation of teacher prepared materials by experts supports the conclusion that, whatever the weaknesses of the resulting product, the newly prepared material was better than the old.

The primary constraint was that of time and money which was simply inadequate to do justice to a project of this size.

From the beginning the project staff was acutely sensitive to the needs and problems of evaluation. This was true with regard both to the goals of evaluation and the roles. Generally speaking, the primary goal of evaluation was to measure cognitive and affective change. The thrust of the activities was to gather and analyze performance data.

The roles of evaluation were varied. One was the training of teachers. Another was the part of the process of curriculum development and experimentation and finally, of course, an evaluation of the final product of the project.

The author of this report helped to draw up the original grant proposal. In addition, he worked as a participant observer on the project staff for the first year of its existence. He was thus intimately familiar with all the details of the project, including teaching a class of teachers and participating in a summer

workshop. During the second year of the project, however, he withdrew completely from all associations with it. During the second year, his role was that of an outside observer and evaluator.

Three other points were important in the rationale for this investigation. Throughout, the evaluation was theory guided. The reasons for this were many, but can be briefly summarized by indicating that any sound evaluation requires forethought, planning, theoretical reasoning, and abstractions.

The second main point is that any evaluation is implemented by individuals. Therefore such variables as intelligence, amount of work, judgment, relationship and commitment to the project, and being available, count for a great deal.

Finally, it cannot be overemphasized that theories must be implemented under local, highly specific and particular conditions within a specific gestalt of assumptions, convictions, and committees. The feel, for local "textures," is very important.

Finally, the evaluation is multi-faceted. By this is meant that several measures are used for evaluation, and several different points of view adopted.

PART II - THE SPECIFICATIONS OF THE PROGRAM BEING EVALUATED

A. THE EDUCATIONAL PHILOSOPHY OF THE PROGRAM

The educational philosophy behind the program was that if the teachers knew the material, were well prepared, had adequate lesson plans and teaching materials, and were supervised, they could do a better job in teaching their students. It was for this reason that a major thrustof the program was training teachers in summer workshops. These teachers, in addition to using the materials in their own classrooms, supervised, taught, and worked with other teachers in their schools. This procedure greatly multiplied the effects of the program and drastically cut per unit costs. College faculty supervised this by means of classes for credit.

Another part of the educational philosophy was that the main criteria for the success of the program was what the students learned. This meant that even though panels, diaries, questionnaires and other anecdotal records were utilized, the central thrust of the educational experience was to be demonstrated by changes in the behavior of the children as they were manifested in affective and cognitive performance at the end of a year-long program.

B. CONTENT AND SUBJECT MATTER

The content and subject matter of the program is based on the curriculum. "An Experimental Junior High School Course in Occupational Opportunities and Labor Market Processes", developed between 1966 and 1968 at Ohio University with a grant from the United States Office of Education. From this came tests and teachers manuals, among other things. Appendix I, is a table of contents of the test *Manpower and Economic Education: A Personal And Social Approach To Career Education*, by Robert L. Darcy and Phillip Powell.[1] All the teachers in the program studied that text plus a standard one-semester college economics text.

In cooperation with the U.S. Office of Education and the Joint Council on Economic Education a national center for the World of Work Economic Education, (WOWEE), was also set up at North Texas State University. It published a newsletter (see Appendix II for sample) and presented a series of nationwide seminars. In addition, the center made curriculum experiments and reported on them.[2]

Content material was also developed by the Joint Council on Economic Education. Two samples are included in Appendices III and IV, "Materials Requested for Display at WOWEE Conferences", and "Some Basic Readings and References in World-of-Work Economic Education".

As an examination of this material will show, the content was primarily economic with an emphasis on career education. It was characterized, however, by sound economics combined with material that could be used in social studies, business, vocational-technical education and home economics. The content was meant to be used in a variety of curricula.

As is common with nationally prepared materials, relatively little fitted the specific needs and aptitudes of teachers in Illinois classrooms. Therefore, one of the main thrusts of the project was to develop classroom usable materials. This was done by selecting ten of the most important WOWEE concepts and developing materials to teach them to the students. The ten concepts selected were:

1. Scarcity
2. Individual choice
3. Opportunity costs
4. Work Satisfaction
5. Occupational projections
6. Job discrimination
7. Collective Bargaining
8. Unemployment
9. Productivity and labor
10. Cost, supply and demand

Around these a massive set of lesson plans suitable for all of the major curricula taught in grades seven through twelve was developed.[3] A sample of these is given in Appendix V, "WOWEE Lesson Planning Packet."

The content of the program, therefore, was primarily economics, adapted to specific classroom situations.

C. THE LEARNING OBJECTIVES AND STAFF AIMS

The primary aim of the project staff was to teach the teachers economic content, specifically that content related to WOWEE. The specific performance objective was a demonstration of a mastery of elementary economics as shown by an improvement on the test scores of a nationally normed test of economic understanding. The test used was the "Test of Understanding of College Economics" which was given to each teacher entering the program as a pretest and in a different form, as a posttest.[4]

The pretest results showed, as has other research on the subject, that most Illinois teachers do not know much economics.[5] (See the study by Parker in Appendix VI) Posttest improvement on the scores indicated that the teachers had indeed learned some economics (about as much as the average four-year college sophomore after one semester of economics).

Another specific performance objective of the project staff was to train the teachers to develop lesson plans incorporating sound economics for use in their classes. This they also were able to do as demonstrated by the examples illustrated in Appendix V.

D. INSTRUCTIONAL PROCEDURES, TACTICS AND MEDIA

The instructional procedures used for the teachers were the same as those the teachers were expected to use for their own students. These included the following:

1. Pre and posttesting
2. Lecture
3. Discussion
4. Group dynamics
5. Games
6. Simulations
7. Computer-assisted instruction

8. Films

9. Slides

10. T.V.

11. Records

There was little formal instruction in teaching methods. The strategy of the project staff was to use a wide variety of sound educational methods, make the teachers aware of their use, and, by example, convince the teachers of their usefulness.

No clear cut conclusion can be reached about how effective this approach to educational methods was. There is ample evidence that some teachers did change their methods somewhat. But how many changed which methods and for what reasons are not well established.

E. THE STUDENTS - SPECIFIC PERFORMANCE OBJECTIVES

The specific aims of the program were twofold. The first was cognitive: the program was to demonstrate that the students learned something about economics and the world of work. The second was affective: the program hoped to demonstrate that students felt more positively about work after exposure to the WOWEE curriculum.

The cognitive evaluation of the project relied on "The Junior High School Test of Economics".[6] This is a test developed by the Joint Council on Economic Education. It is nationally normed and validated. It is an instrument designed for the testing of content acquisition of elementary economics for grades 7 through 9.

Because the instrument was not specifically designed for this project it undoubtedly missed many gains of the project. A copy of the test is given in Appendix VII.

The instrument chosen to discover what, if any, changes occurred in student attitudes toward work was the unpublished, "Were I a Worker", developed by M. F. Smith.[7] The version used during the first year of the program, shown in Appendix VIII, proved to be unsatisfactory and so the project staff developed the second version

shown in Appendix IV. The instrument makes use of the Osgood semantic differential technique . Using the usual methods of interpreting the results, primarily in terms of global differences, did not appear methodologically sound for this investigation. As a result, the project staff has been working to develop more appropriate methods.

Ideally one would like to have some other kind of comparative measure that is independent of the test being used, in order to gain some idea of the characteristics of the student population. This proved impossible. All we can say at this point is that a wide variety of students were represented in terms of social and economic backgrounds, place of residence (i.e., urban, rural or suburban), and probably with respect to other critical educational variables such as reading levels.

F. THE INSTRUCTIONAL AND COMMUNITY SETTINGS

The instructional and community settings vary widely. They vary in terms of curriculum ranging from a few mathematics teachers through social studies teachers, business teachers, vocational/technical education teachers and home economists.

The community settings ranged from small rural schools in downstate Illinois, to inner-city schools in Chicago and Rockford. The students came from some of the poorest districts in the state and some of the wealthiest. Few valid generalizations can be made about the instructional and community settings.

G. THE STANDARDS AND BASIS FOR JUDGING QUALITY

The fundamental standard of the program was that of accepted economic knowledge. The basis for judging the quality of student learning was performance based on a pen and pencil test.

H. PROJECT TIMELINE

1973, August - October	Grant Preparation , October-Submission of grant
1974, February	NSF Funding Announced

March 15 to May 1	Selection of key teachers for training - alternates
May 9 and 10	Spring Conference on WOWEE at NIU
June 17 - 28	First week of three hour graduate credit summer workshop in economics for key teachers
June 28 - July 28	Writing of implementation plan
July 29 - 31	Workshop at NIU
August 1 and 2	Beginning of implementation phase of the program
1974, July	Grant application to NSF for continuation of project
1974, September 1 to 1975, June	Implementation of program in classroom
1974, October	Statewide Conference on WOWEE
1975, January 31	Presentation at Illinois Consumer Education Association Annual meetings
1975, March	Statewide Coordinators' Conference at U.S. Steel on using the field trip as a learning experience
May 9 and 10	Statewide Conference at Starved Rock State Park
July 28 - August 8	NSF funded summer workshops at NIU
Summer 1975	Analysis of test results preparation for next year reports to NSF
1975 to May, 1976	Second year of project implementation in the classroom
1976, July and August	Analysis and processing of second year results
1976, August	Summer WOWEE at NIU (not funded by NSF)
1976, October	Final report and evaluation submitted to NSF

PART III - PROGRAM OUTCOMES

A. BENEFITS

The following list of benefits, though often incommenserable, are real. Evidence exists that at least seven distinct groups have benefited, often in more than one way, from the project. Because the project was, from the outset, student-oriented, their benefits are discussed first. The order of the following groups

does not necessarily indicate the importance of the benefits to the group.

1. Students who were in the program benefited by learning more higher quality economics. This is a definite cognitive gain and if the program were to be evaluated on these terms alone, it would have to be called successful. An important question is, of course, whether or not the students could have learned as much or more by some other method.

Students also changed their attitudes toward work. Most probably this was in a way that made them understand and be more favorable toward work although this conclusion is not, as yet, certain. There were other possible gains that were not measured by the project, although they were reported by numerous teachers and students. Among these were better attendance records, indications that the students were interested in the subject as shown by discussions and activities, and some growth of skills; as indicated by ability to fill out forms such as check books or to do comparative shopping.

2. Teachers in the project benefited as they learned more high quality economics. This is demonstrable on the basis of pre and posttesting scores. But there were other benefits: on a personal level many of them earned three to nine hours of graduate credit. The probably employed better teaching methods. At least they were given examples of them and were made conscious of a wide variety of good teaching methods.

Again, not precisely measured, but widely reported was the fact that the teachers felt the infusion of economics enriched their curricula. The teachers benefited on yet another level. Because curriculum change was involved, they had to work with school administrators, Boards of Education, other teachers and community leaders. Many of them had to take new roles and become more active in both the school and their community as a result of this program. They often sought guidance from project staff and there is no doubt that many of the teachers improved their skills with respect to human relations in the school and their communities.

3. Curriculum specialists and others who are not in the project, benefited from the evidence that we can teach about work in social studies and other curricula that have had, and occasionally still have, deep resistance to change. In many parts of the country, struggles are going on over the possibility of effectively teaching work-related materials in curricula where they have not appeared in the past. This project demonstrated without any question, that it can be done and that educational infusion properly carried out can be successful.

4. University faculty benefited. They had to pay attention to neglected areas with respect to teacher training in economics. This was probably not a widespread benefit, limited to perhaps a handful of college teachers, but with the potential of growth in the future. Those college teachers who did attempt to train elementary and high school teachers found that they had to pay attention to ideas and methods that some had neglected in the past.

5. Most of the school administrators connected with the program benefited in two ways. One, they received the praise typical for any administrator who successfully innovates. Secondly, they found themselves with a model that could be applied to other curricula.

Some of them further benefited from either the establishment or further development of ties with other professionals, either at the university level or in business or with other school districts.

6. Community and business leaders became more aware of the problem of economic education and this led them to make substantial contributions in the form of grants and the use of facilities. For example, the AMOCO Foundation is supporting a third year of WOWEE implementation with a grant of $26,000. The involvement of the business community had an unanticipated side effect which was of substantial value. Specifically, it showed several members of the business community the inadequacy of their own efforts in educating the public about economics. This led, in several specific cases, to a substantial upgrading of the quality of economics materials offered by large corporations to the general public.

7. The government, and the National Science Foundation in particular, benefited as a result of nationwide publicity and favorable notice of the project it had funded. It was a successful demonstration of the seed money concept.

8. The research community and educational theorists benefited in two ways. Probably the largest single sample of young boys and girls was tested with a reliable instrument to determine if sex-linked differences existed in economic knowledge at earlier age levels. It established conclusively that they do not. This means that we have now isolated part of the problem, namely, the age levels at which these sex-linked differences do appear. The other major benefit for the research community concerns the very critical look at the problem of measuring affective change in economic education. Previous research in this area was very slight indeed. The difficulties now appear to be greater than had been suspected. Although this finding is a negative one, it is still significant.

B. COSTS

The costs of this project are of two main kinds. One is a direct, out-of-pocket, cash cost which is relatively easy to measure and estimate. The other kind of costs are those of lost opportunities. Could the students or the teachers or the researchers or the project staff have been doing something better with the time they spent on this project? These different kinds of costs are difficult to quantify, as are the benefits. Both kinds, however, have to be taken into account.

The total dollar cost can be estimated as follows:

1973-Contributed grant preparation time	$ 1,000.00
First grant-NSF funds	31,833.00
First grant contribution from NIU	1,500.00
Other contributions for first grant from ICEE	6,733.00
Second grant-NSF funds	37,881.00
Second grant contributions from NIU	4,022.00
Second grant contribution from ICEE and DAVTE	7,000.00
McDonald's Corporation grant for editing of WOWEE packet	3,500.00
	$93,469.00

If we estimate that school boards spent at least $5.00 per child in materials and texts, and considering that about 10,000 children were involved in the program, another $50,000 of cost is apparent. Another major item of expense is related to teacher time. During a three year period, at least 400 teachers spent two days at workshops payed for by their boards of education. If this 800 person-days is conservatively valued at $50.00 a day, another item of $40,000 must be added. The total cost is thus nearly $200,000.00. If we estimate administrative costs on the part of the granting organizations, schools, business, government, and university, at 20 per cent of the grant, then another $40,000 should be added.

In total, then, about $240,000 was spent on a project up to October, 1976. This is a very conservative estimate, as it includes only low estimates for major items. If more detailed estimates were made of the time contributed by school district administrators, contributions in kind like those of United States Steel (which contributed the facilities for a day tour for 80 teachers), and the donated time of numerous individual teachers, the total would be higher.

The other side of the cost picture is more puzzling. Turning first to the students, if we assume that if the students had not been studying the project materials, they would have been studying something wrong, then the opportunity costs of the students' time would be negative. But this is an extreme assumption. If we assume that instead of studying project materials, the students studied something that was less valuable by some measure, then the opportunity cost of the students' time is the difference in "value" between what the student would have studied and did in fact study. It seems reasonable to assume that although the students may have incurred some opportunity costs, they were probably very small. The only case in which it could have been large would have been one in which the students could have been studying material which resulted in much greater learning or learning of

greater value in place of project material. For this to have occurred, one would have to make the further assumption that the school district officials, or the teachers, misjudged the alternatives open to the students. Our project records show no instance of this ever happening although, of course, it does not mean it could not have happened.

For all other participants in the program, entry to it was voluntary. This means, presumably, that each person evaluated alternative opportunities at the time and selected the project as the best available alternative. The result of this process would probably be that the opportunity costs were very small. The reason is simply that a person would not select the project if some other alternative gave him much greater return. According to anecdotal records, the alternatives open to most teachers, especially during the summer time, were very unattractive. The opportunity costs in that case were very low. With respect to classroom time, the opportunity cost, from the teacher's point of view, appeared to be equally low. In the vast majority of cases, there was simply no available opportunity for systematic and organized course improvement. Of course teachers could do it by themselves but in that case the opportunity cost would be very high as compared with the project.

In summary, for this project, the most important costs appear to be the approximately quarter of a million dollars that was required to run it from late 1974 to late 1976.

C. SIDE EFFECTS AND UNEXPECTED BENEFITS

The project had four side effects, most of which were unexpected bonuses. In soliciting business for funds for the WOWEE project, some businessmen became aware of the resources of the Illinois Council on Economic Education and the weaknesses of some of the economic education material they were preparing and purchasing. In at least two

cases, material that will be distributed nationwide, was substantially improved through the cooperation of academicians associated with the project and community leaders. It may be that more people will learn better economics as a result of improvement in commercially prepared materials than through the classroom.

The nationwide and favorable publicity that conference reports, articles, and other media present ought to be of benefit to the National Science Foundation, which is so beset by political problems.

Another benefit was the development of a model for working with teachers. Training in-service teachers has been very difficult in recent years. Funds for release time are low, union regulations are strict about payment for extra work, promotion is often automatic based mainly on time in service. Educators have been worrying about how they can get experienced teachers updated in their content knowledge and teaching methods. The project found that this could be done through a combination of workshops and graduate credit courses with very little cost to the teachers.

Finally, the research, in two areas especially, is almost certain to be of some significance. Sex-linked differences in learning simply do not appear up to about the end of high school. Since they are apparent later, we now can look at that time period (from late high school to early college) and examine it carefully to see what might make these sex-related differences appear. The other important findings are negative and related to the fact that the usual ways of treating semantic differential analysis at this grade level and for economics were not methodologically satisfactory. Much work, therefore, has to be done if we are to get any reasonable measure of changes in feelings about work and economics.

Many questions were, of course, left unanswered. For example, for the first year of the project the teachers were largely self-selected. Does this mean that

only the more ambitious or aggressive or brighter teachers joined the program? Is it possible that almost any project using such teachers would be a success? We do not know much about the teacher variable.

PART IV - METHODS, RELATIONSHIPS AND INDICATORS

A. STATISTICAL METHODS AND RESULTS

The method used for gathering statistical data was the common one of using an experimental and control group with a pretest and a posttest. The experimental groups were those students taught by the teachers in the program. Each teacher was then asked to find a class as much like the one being taught as possible, but one that would not be exposed to project processes and materials. Thus, neither the experimental nor the control groups included subjects chosen from a population by random methods. This was not a serious methodological problem because the large number of teachers and students gave us sample sizes that allowed us to estimate the parameters reliably.

The teachers in the program were not required to teach the same material. It is for this reason that a more broadly based test of economic knowledge was used rather than a narrow one. All the students in both the experimental and control groups took a pretest at the beginning of the school year. The experimental group was taught the project materials. A large number of students in both the experimental and control groups who took the pretest did not take the posttest. When we were unable to match the pre and posttests, we simply discarded the pretests. The sample size was still large, over 1,000 for both years. The testing program presented the following convincing results. The distinction between the experimental and control classes was not statistically significant for the pretest. It was for the posttest. The experimental students in the first year scored an absolute gain of 3-1/2 points, while the control group score, on the average, a 1.4 point gain.

The control group did learn some economics, probably due to maturation and incidental learning. The control groups' learning was not statistically significant, although that of the experimental group was highly significant. Appendix X reproduces the main statistical details of the project's cognitive evaluation. For a full discussion of these quantitative results see Soper's recent paper.[8]

The problems of affective measurement are both theoretical and practical, with many unresolved issues confronting researchers and evaluators in all fields. To quote Soper, "However, in the affective domain, there are no nationally developed instruments for the assessment of changes in students' attitudes, opinions or values concerning matters economic. [Available instruments] ... are neither readily available nor of known or widely-accepted quality."[9]

B. OTHER METHODS

Ten methods other than the formal pre and posttest, control/experimental group statistical analysis were utilized in the evaluation of the project. These methods were utilized on a sample basis. The size of the sample was generally about ten to twenty per cent of the population being studied. For example, if ten classes were being conducted for teachers, two of those classes might be required to keep day-by-day classroom diaries.

Throughout the life of the project teachers were required, in order to get course credit, to keep classroom diaries. These diaries are day-by-day accounts of what the teacher did in the classroom, his or her preparation, student reactions, feelings about the material and anything else which the teacher wished to put in the diary. The diaries vary greatly in length and quality, but they indicate a strong committment to the program and attempts to make it work despite all kinds of difficulties. These difficulties range from hostility of other teachers to lack of facilities and materials to the abrupt shutting down of the largest school system

state 16 days before the scheduled end of the semester. The impression one gets from the diaries is that the teachers were a determined, ingenious group who enjoy their work. Although pleasure may be too strong a term, the diaries clearly indicate a sense of professional satisfaction as they attempt to change their course in ways they think will improve student learning.

In a few cases project staff and school district curriculum personnel visited the classroom while the teacher was teaching new materials. In every case, this was reported to be a successful experience. Too much weight should not be given to this method of observation because most frequently the teacher would only allow observation if he or she felt confident with the materials and methods to be used and felt that "a good show" would be provided for students and any outside observers. For what it is worth, however, the limited number of classroom observations confirms successful teaching of WOWEE materials.

In most of the courses that the teachers took for graduate credit (that prepared them for the new materials), the teachers were required to make a presentation to the class of other teachers and a professor. These presentations typically included a lesson plan, a pretest, a posttest, and a sample of actual classroom program methods that would be employed. Almost always these presentations showed a great deal of care and were based on sound economics. The critique and discussion that followed the presentation often led to the elimination of what flaws were in it and other improvements. Although one cannot be certain that the presentations were as successful for actual students as they were for peers, it seems reasonable to assume that a carefully prepared and rehearsed lesson should provide a better teaching experience for students than one that is not.

A casual sampling of attendance records indicated that attendance was better in the classes where WOWEE materials were used than in the control classes. This may have been because the most enthusiastic and successful teachers were the ones who made such comparisons and volunteered the results.

Some of the teachers in the program asked their students for their reactions to units and materials. Almost uniformly where this was done, student reaction was good. In many cases the students felt that the material they were getting when compared with the material the students in the control group were getting, was much more interesting and exciting. In many of the schools, the students in the experimental group knew they were in an experimental group and knew that there were students in control groups. In several cases, the students in the control groups complained that they were not being taught the more interesting and useful material.

Teacher reactions were solicited, in addition to those in the diaries. Anonymous questionnaires called upon the teachers to evaluate the materials and other aspects of the program. The questionnaires typically left room for suggestions for improvement. Once again the overwhelming reaction of the teachers was favorable and the suggestions for improvement were, when possible, carried out. Another method for judging teacher reaction was in terms of the drop-outs from the program. Attendance records kept by the professors indicate that drop-outs were very unusual in contrast to the situation which more commonly prevails. Probably less than 5% or 5 teachers out of more than 100 dropped out of the course. In most of these cases new teachers joined the program in mid-year.

Another, more indirect, method of determining teacher reactions was in terms of the grades that the teachers received for the courses they took to prepare themselves. By far the greatest majority earned A's, with very few B's or C's. This was not due to laxity or an easy grading policy. Typically, the course requirements were spelled out in great detail and in order to earn the grade of A, the teachers had to do substantial work in addition to the usual requirements of classroom attendance and papers for a graduate course.

In economics, a national award program is sponsored by the Joint Council on Economic Education and The International Paper Company Foundation for teachers presenting high quality material. A similar, statewide awards program, sponsored by Montgomery Ward, provided further recognition for innovative approaches to the teaching of personal economics, including WOWEE. The awards were made on a competitive basis. In the two-year period of the project being discussed, at least six teachers won awards from the top prize of $500 down to honorable mention. The percentage of teachers from the program who won awards was far higher than could be expected on a basis of chance.

Another method for measuring the success of the program is in terms of the state and national recognition given to the staff and other participants in it. In the case of this program, several of the staff members have been asked to make presentations before, for example, The National Council for the Social Studies, various state councils for the social studies, the Illinois Economic Association, the National Association of Affiliated Economic Education Directors, and others.

Still another method that cast some light on the value of the program is the number of grants that participants in the program received from other agencies both state and federal. Several school districts and teachers in the program were awarded such grants as a direct outgrowth of their experience in the program.

Finally, experts from outside the program have reviewed it. Among experts who have reviewed it and passed favorably upon it are those from the National World of Work Economic Education Center, out-of-state universities, economic education directors from other states and staff members of the U.S. Office of Education, and the Joint Council on Economic Education.

No one of these methods is reliable or valid enough to enable conclusive judgments about the program. Each of these methods is from a somewhat different point of view. Taken together, however, and since there is no serious dissent, the sum of these methods must command some respect and attention in making a final judgment.

PART V - JUDGMENTS OF WORTH OF THE PROGRAM

A. VALUES OF OUTCOMES FROM DIFFERENT POINTS OF VIEW

Educational improvement is an incremental and developmental process. It occurs in complex situations under a wide variety of different circumstances. It is difficult and slow. Reasonable judgments take this into account.

With the single exception of demonstrable affective change the project has been a success no matter from what point of view it is examined. Most observers would argue that successes are so outstanding that the difficulties in the measurement of affective change should be overlooked, particularly since no one else has been able to do very much with the problem.

But some questions remain. Will the program last? Of course one cannot tell now if it will. But there is reason to think that an important breakthrough in curriculum development has occurred in this instance. The third year of the workshops was financed without any governmental funds. This is highly unusual with respect to summer workshops. In addition, because of the involvement of the community and boards of education, many of the curriculum changes are now institutionalized so that, for a time, their continuance is virtually guaranteed. And educators really would not want much more than that. There is very little in theory to guide us about how long a new curriculum development should remain or indeed how fast an entire curriculum should change or what parts of a curriculum should be changed when. Lacking such theory, prudence and reason would suggest that from one year to the next most curriculum should remain the same and only small parts of it change in ways that are demonstrably better. In America it appears that the entire high school curricula changes in about 30 years. This implies a rate of change of about 3% a year. In the case of the WOWEE project small, demonstrably effective changes have occurred and are occuring.

If we ask the question, "Was the project worthwhile?", the answer has to be that it was. That it could be improved is also obvious, but at this point another very important question arises. If more funds are to be invested in the project, should it be for improving it or for disseminating it more widely? Here an economic analysis can be helpful. If we make the crude assumption that 10,000 students gained 2.1 points by improving on a pre and posttest basis over those who did not, the cost per point of improvement, assuming a total dollar expenditure of $250,000, is about $12.50 per point. These are relatively large gains at a relatively small cost. It is unlikely that if another $250,000 were spent solely to improve the materials and methods that a similar gain in achievement could be expected. If economic considerations are important then the strategy should emphasize more spending on dissemination with relatively small amounts for improvement of the model, materials, or methods.

B. THE RELEVANCE OF OBJECTIVES TO NEEDS

The list of needs of American education are great indeed. They are usually drawn up by highly biased partisans, leaving reasonable people ample room for doubting the usefulness of such needs. This program has emphasized economic education and the World of Work. Few would quarrel with the contention that children should know something about both. The real issue, however, is whether or not there are other needs of even higher priority. The obvious claimants for priority are reading, writing, and arithmetic. But even these must have content. If it could be shown that one or all of these other areas were more important, then the project, in its future development, should consider emphasizing those skills with economic and work related content materials.

Until some such judgment is made about priorities one can reasonably conclude that this project was highly relevant to the needs of this society.

APPENDICES

I. Table of contents for *Manpower and Economic Education* by Darcy and Powell.

II. *WOWEE Newsletter*

III. "Materials Requested for Display at WOWEE Conferences"

IV. "Some Basic Readings and References in World-of-Work Economic Education"

V. WOWEE Lesson Planning Packet (Sample)

VI. Parker Study

VII. Junior High School Test of Economics

VIII. "Were I a Worker ..." (1974-75 version)

IX. "Were I a Worker ..." (1975-76 version)

X. Regression Results for WOWEE Cognitive Evaluation

FOOTNOTES

[1]R. L. Darcy and P. E. Powell, *Manpower and Economic Education: A Personal and Social Approach to Career Education* (Denver, Colorado: Love Publishing Co., 1973).

[2]William A. Luker, *et. al., Integrative Manpower-Economic Education: An Experiment in Curricular Change* (Denton, Texas: The Manpower and Industrial Relations Institute, North Texas State University, 1974).

[3]S. S. Mantlo and R. B. Smith, eds., *World of Work Economic Education Implementation, Infusion and Activities Packet* (DeKalb, IL: Illinois Council on Economic Education, 1975).

[4]Rendigs Fels, *et. al., Manual: Test of Understanding in College Economics* (New York: The Psychological Corp. and the Joint Council on Economic Education, 1968).

[5]E. T. Parker, "A Study of the Status of Economic Education in the Illinois Schools (K-12)", The Illinois Council on Economic Education, n.d.

[6]*Junior High School Test of Economics* (New York: Joint Council on Economic Education, 1974).

[7]M. F. Smith, "Were I a Worker ..." (Gainesville, Florida: Project FAIS, P. K. Yonge Laboratory School, University of Florida, 1971).

[8]John C. Soper, "Needs for Evaluation in Economic Education", in *Proceedings of the National Conference on Needed Research and Development in Pre-College Economic Education*, W. Lee Hansen and Donald R. Wentworth, eds., forthcoming.

[9]*Ibid.*

OE 008 598

DEC 2 1976

APPENDICES

to

FINAL EVALUATION

W O W E E PROJECT

APPENDICES

I	Table of contents for Manpower and Economic Education by Darcy and Powell
II	WOWEE Newsletter
III	"Materials Requested for Display at WOWEE Conferences"
IV	"Some Basic Readings and References in World-of-Work Economic Education
V	WOWEE Lesson Planning Packet (Sample)
VI	Parker Study
VII	Junior High School Test of Economics
VIII	"Were I a Worker . . ." (1974-75 version)
IX	"Were I a Worker . . ." (1975-76 version)
X	Regression Results for WOWEE Cognitive Evaluation

DEC 2 1976

APPENDIX
I

Contents

Illustrations			8
Tables			9
Case Studies			11
Foreword			13
Preface			15
Acknowledgments			18
		UNIT ONE THE INDIVIDUAL AND THE NATURE OF WORK	19
Lesson	1	The Future of Work in American Society	21
	2	Education and Work: A Means of Discovering Oneself	24
	3	The Nature and Functions of Work	29
	4	The Job: Satisfaction or Disappointment?	33
	5	The Long Arm of the Job	36
	6	An Affair of the Heart	38
	7	Making Something Out of the Job	43
	8	"A Sure Sense of His Own Usefulness"	46
	9	Work and Mental Health	50
	10	Aspiration and Achievement	54
	11	"I'm a—Physical, Social, Psychological—Person"	57
	12	Work: Test Site of Human Relations	61
	13	Is There Reason and Justice in the Work Place?	66
	14	Man Is More Than a Means of Production	70
	15	What Price Success?	73
		UNIT TWO THE ECONOMIC WORLD: AN IMPORTANT PART OF OUR SOCIAL ENVIRONMENT	77
	16	What Is Economics All About?	80
	17	What Are the Three Basic Problems Facing Every Economic System?	84
	18	Economic Institutions: The World As It Really Is	87

Lesson	19	Capitalism: "The Anatomy of Free Enterprise"	91
	20	The Circular Flow of Economic Activity	95
	21	The Division of Labor and Economic Interdependence	100
	22	Tools of Economic Thinking/Theory	104
	23	Tools of Economic Thinking/Statistics	108
	24	Tools of Economic Thinking/History	113
	25	Scarcity, Opportunity Costs and Choice	117
	26	"There Is No Such Thing As a Free Lunch"	121
	27	Economic Goals of the American People	127
	28	"The Business of America Is Business"	132
	29	Government's Role in Economic Life	137
	30	The Role of Labor Unions	142
	31	Consumers of Abundance	148
	32	Wages, Earnings and Family Income	153
	33	Will There Be Enough Jobs for Everyone?	158
	34	Money and the Trade-off between Unemployment and Inflation	163
	35	Will Economic Growth Solve All Our Problems?	167

UNIT THREE
THE MANPOWER MARKET 173

	36	The Manpower Market: Workers and Jobs	175
	37	Measuring What Happens in the Manpower Market	179
	38	The Changing Manpower Market	183
	39	Collective Bargaining in Organized Markets	187
	40	How Does a Worker Find a Job?	193
	41	What Do Employers Expect from Their Workers?	200
	42	The Causes and Costs of Unemployment	204
	43	Portrait of the Unemployed	211
	44	Help for the Unemployed	217

UNIT FOUR
CAREER OPPORTUNITIES IN THE AMERICAN ECONOMY
223

Lesson	45	The Work That People Do	225
	46	Finding the Trees in the Employment Forest	229
	47	On Top in the Service-Producing Era	234
	48	Farm, Blue-Collar and Service Workers	240
	49	They Get the Work Done in American Industry	245
	50	". . .But Woman's Work Is Never Done"	250
	51	Occupational Needs in the 1970s	256
	52	Industrial Sources of Employment in the 1970s	261
	53	Where the Jobs Are	266
	54	Employment—From the Roaring '20s to the Soaring'70s	270

UNIT FIVE
RATIONAL DECISIONMAKING, VALUES AND CAREER PLANNING
277

	55	What Are the Steps in Economic Decisionmaking?	278
	56	"Who Am I? What Am I Becoming?"	280
	57	A Formula for Achievement	283
	58	Housewife or Career Girl?	286
	59	First the Plan, Then the Career!	290
	60	Economic Decisionmaking and Career Planning	297
	61	Value Judgments: Is It Possible to Know What's Good?	302

UNIT SIX
TECHNOLOGY, SKILLS AND INVESTMENT IN EDUCATION
307

	62	The Knowledge Explosion: Technology, Automation and Cybernation	309

Lesson	63	Benefits and Burdens of Technological Change	313
	64	World-View for a Changing World	318
	65	Are Today's Skills Good Enough for Tomorrow's Jobs?	322
	66	Education for Successful Careers	328
	67	Skills for Your Skill Bank	334
	68	How to Get the Skills Needed for Tomorrow's Jobs	340
	69	Education: An Investment in Human Resources	345
	70	Rewards for Education and Work	351
	71	Technology and Education: Engines of Economic Growth	358
	72	The Benefits and Costs of Education	363
Postscript			369
References			373
Index			377

Illustrations

UNIT ONE

The Changing Nature of Work ... (Figure 1.1)	31
The Long Arm of the Job	36

UNIT TWO

Roles in Economic Life	79
Circular Flow of Economic Activity (Figure 2.1)	96
Business Firms in the Circular Flow Model (Figure 2.2)	132
Total Union Membership in the United States, 1900-1968 (Figure 2.3)	144
Consumers in the Circular Flow Model (Figure 2.4)	150
Circular Flow Model: Jobs =f(Total Spending) (Figure 2.5)	159

APPENDIX II

DEC 2 1976

NATIONAL CENTER WORLD OF WORK ECONOMIC EDUCATION • DR. LEWIS M. ABERNATHY, EDITOR

WOWEE

NEWSLETTER

Number 5
Fall 1975

Joint Council on Economic Education, 1212 Avenue of the Americas, New York, N.Y. 10036 and Manpower and Industrial Relations Institute, North Texas State University, Denton, Texas 76203

September 1975

Participants, NATIONAL LEADERSHIP WORKSHOP IN WORLD OF WORK ECONOMIC EDUCATION, July 14-August 2, 1974, North Texas State University, Denton, Texas. From left to right:

First Row—Marguerite Martin, New Jersey; Helen Cook, Georgia; Mary Witherow, Missouri; Claire Wormley, Alabama; Kaye Hamm, Colorado; Jim Sullivan, Rhode Island; Kathy Helwick, Staff; David Tester, Illinois; Patricia Roach, Arkansas; Louis Griger, Texas; Stowell Symmes, Staff; Deane Howard, California

Second Row—Linda Moran, Ohio; Geraldine Phelps, New Hampshire; Kay Wolfer, Texas; Pamela Hamilton, Staff; Richard Gastler, Minnesota; Deanne Coward, Kansas; Marjory Cooper, North Carolina; Kathryne Sandlin, Oklahoma; Ronda Alexander, Staff; Janice Bailey, Staff

Third Row—Lewis M. Abernathy, Staff; Floyd Bishop, Mississippi; Robert Janss, Idaho; Marvin Lantz, Pennsylvania; Larry Ottele, Colorado; Mark Burkhart, Indiana; Robert Rammes, Ohio; Donald McCoy, Kansas; Gerald Johnson, Washington; William A. Luker, Staff; Robert Smith, Maryland; William Bobier, Nevada

(Not pictured, George Conom, Wisconsin)

WOWEE IN WASHINGTON STATE

Gerald Johnson, Director of Project Future in Bremerton, Washington, and a participant in the 1974 WOWEE Leadership Workshop at North Texas State, stresses an interdisciplinary approach to career exploration and planning, with heavy emphasis on the theory and realities of employment in our present and future business, industrial, labor, and human services enterprises. Project Future, a Career Education Model Project, has been described as a "lighthouse" program in the State of Washington in that it skillfully infuses and bonds together economic education and career education into the curriculum of existing subjects.

As a result of grant funding, Project Future is developing a series of television tapes for in-service teacher training in economic education. Dr. William A. Luker, Director of the Center for Economic Education, North Texas State University, spent the week of May 26-May 30th in Bremerton where he taped five three and a half hour economic/career education sessions with Project Future. Ten Bremerton teachers who participated in the taping received tuition-paid credit from Pacific Lutheran University.

This special "mini-course" will be edited and used for statewide (and perhaps countrywide) teacher in-service training. The tapes were used by Mr. Johnson in the Economic Education Workshop directed by Dr. Thomas Bonsor, at Eastern Washington State College during the weeks of July 21st through August 8th. Dr. Bonsor also utilized the I(t) Work(s) Multi-Media Instructional Package consisting of synchronized slides and cassettes, monographs, and workshop and teachers' guides with how-to-do-it lessons in integrating WOWEE concepts into every subject in the curriculum.

Project Future and the Centers for Economic Education at Pacific Lutheran and Eastern Washington State Universities are providing the in-depth teacher training which is so vital to the implementation of world-of-work economic education programs in the public schools.

SCHOOL TALK FEEDBACK FROM TEACHERS

"School Talk" is a regular feature of the WOWEE Newsletter, and the editors welcome contributions from educators describing their experience with world-of-work economic education programs. The contributions to this issue are excerpts from implementation reports from participants in the National Leadership Workshops held at Colorado State University during the summer of 1973 and at North Texas State University during the summer of 1974. Participants in the North Texas State Leadership Workshop are pictured on page 1.

Kathryne Sandlin, Coordinator for the Developmental Economic Education Programs for Putnam City Schools in Oklahoma City, reports that a Career Information Center with an Occupational Information Specialist in charge has been established in the Putnam City Senior High Library. Records indicate that from September to April, one thousand students per month visited and used the facilities of the Center. Ms. Sandlin indicates that elementary schools in this district are making plans for next year to integrate career education into Bi-Centennial observances through a 1776 to 1976 developmental concept which will include such concepts as types of work available in transportation and banking and finance then and now.

Dennis Kueng with the Minneapolis Public Schools Department of Social Studies is involved with others in his district in planning an Economic Education Center just for the students in Minneapolis. The WOWEE program will be integrated into the many other economic education curriculum programs of the Minneapolis schools and will be offered to students during the 1975-76 school year.

Pueblo, Colorado Career Education Coordinator, Kaye Hamm, and her colleagues are using several Careerpacs written during the Career Education Workshops conducted in Southeastern Colorado. These units are especially noteworthy for the variety and practicality of the activities included.

The Dayton, Ohio Public Schools have had a very productive year in implementing WOWEE concepts and activities. Robert Rammes, Project Director for Career Development believes that teachers in his area are beginning to understand the strong relationships between the world of work and economics and that this knowledge is being carried over into classroom curriculum areas. Mr. Rammes and his staff cooperatively planned with the Department of Economics at Wright State University a three-hour graduate credit Economic-Career Education Course for teachers which ran from October to December of last year. Ralph Germer, Assistant Professor Economic Education, worked with Rammes and his staff in implementing this course. Program structure included Jack Ford, Head of Career Education, Ohio State Department of Education; Dr. Charles Blake, Assistant Professor of Economics, Wright State University; Joseph Quaranta, Teacher Education, Ohio State University; Dale White, Bill Krintzline, Nancy Jones, Coordinators of Career Motivation Orientation and Exploration; and Emma Williamson, Coordinator, Consumer Education. Course structure also included teacher demonstrations of WOWEE activities and a panel discussion by members of business and industry.

Floyd E. Bishop, Principal of D.U. Maddox Junior High School in Laurel, Mississippi, and his staff started this year's emphasis on Economic Education with two classes built around economic oriented presentations. Two work conferences on career education have been held, and Mr. Bishop and his staff are working with Dr. Frank Posey of the University of Southern Mississippi faculty in planning two college credit courses for teachers. One class will be oriented toward elementary and one toward secondary teachers. Mr. Bishop appeared before the Mississippi Economic Council this spring and reported on last summer's WOWEE work conference at North Texas State University and other related activities being implemented in Mississippi.

Mary Withrow, Business Education Consultant for the Saint Louis Public Schools reports that she came back from the North Texas State University WOWEE Workshop "all excited" about putting the ideas gained at the workshop into practice. In a realistic attempt to incorporate economic education into St. Louis' current business education curriculum offerings, the WOWEE unit, Efficient Office Procedure, which was developed by Ms. Withrow and Mark Burkhart, Business Education Department Chairman of Central High School in Muncie, Indiana, at the WOWEE Workshop, was used by ten general high schools in St. Louis. This involved approximately 370 students on the senior level in a unit which infuses seven basic WOWEE concepts into the existing office and secretarial practice courses. This unit has been submitted to the International Paper Company Foundation Awards Program for the teaching of economics.

Existing courses in American Government and Economics at Capital High School in Boise, Idaho, have been expanded to incorporate WOWEE concepts which center around the role of labor in our society. Robert Janss, a participant in the WOWEE Workshop at North Texas State University reports that student reactions

(Continued on Page 3)

are highly favorable and that the success of this approach suggests a revision of the curriculum of the American Government-Economics course of study for the school district.

Marie Charles, Supervisor of Career Education Curriculum for Pinellas County, Florida, reports that in the St. Petersburg Area more economic education activities are being developed and implemented into the school curriculum at all levels. The Pinellas County Career Education Curriculum Model includes a host of world of work-economic education activities which are both appropriate and practical for incorporation into the existing curriculum.

The Atlanta, Georgia schools are now implementing a system-wide plan to insure that students emerge from the schools with the social skills and economic understanding necessary to become successful producers of goods and services. Helen Cook, Atlanta's Career Education Director, reports that schools are concerned with the installation and/or modification of courses that will contribute to students' development of marketable skills and that Atlanta students must have thirty quarter hours instruction in no more than two skill areas in order to graduate after June, 1977. Other Atlanta activities this year included a Career Education Workshop with Dr. Kenneth Hoyt on September 19; a "Bread and Butterflies" workshop in October in cooperation with the Littlejohn Company; and the development of a series of units (K-12) dealing with entrepreneurship among minorities.

Robert Smith, Career Education Resource Teacher for the Ann Arundel County, Maryland Public Schools returned to his school system from the North Texas State University WOWEE Workshop with notes and materials whose study and evaluation resulted in the purchase of software to be used in incorporating economic concepts into classroom instruction. In cooperation with the Maryland Council on Economic Education Director, Robert Highsmith, Mr. Smith and Ann Arundel teachers, have been drawing materials, and community resource persons into the classroom to communicate to students the economic significance of work.

M. Ray Kelly, now Assistant Superintendent of the North Penn School District in Lansdale, Pennsylvania, attended the 1973 WOWEE Workshop at Colorado State University. Dr. Kelly reports that as a result of his experience there, four teachers from his former school district in Plainfield, New Jersey, representing academic disciplines of English, Social Studies and Mathematics, returned to Colorado State for further WOWEE instruction and are now making a terrific impact particularly among the junior high faculty. North Penn, Dr. Kelly's present district, has launched an exciting career study program involving local businesses and agencies with senior students, to utilize the community outside the school as a learning environment for real life application of school acquired concepts.

SELECTED MATERIALS IN WORLD-OF-WORK ECONOMICS

Following are some materials recommended for teachers, counselors, curriculum planners, and others interested in world-of-work economics.

Activities For Succeeding In the World of Work, Grady Kimbrell and Ben S. Vineyard, Bloomington: McKnight Publishing Company, 1972. $2.64.

Career development activities which provide a sequence of experiences appropriate for students exploring career choices. Included are "career consultations" i.e. planned interviews and visits with different persons earning their living in a variety of jobs.

Web of the World: Interdependence of People and Places, Phillips Viereck and Bertha Davis, The Macmillan Company, New York, 1971.

This world of work-economic education oriented Social Studies text, appropriate for grades 4-7, focuses on interdisciplinary and community experiences in tune with the realities of today. The annotated teacher's edition combines well-defined objectives and lesson plans with concrete skill building and media activities which allow great flexibility of adaption to the local curriculum.

Working, Studs Terkel, Avon Books. New York, New York, 1972. Paper back edition, $2.25.

Studs Terkel spent three years talking to people in a wide variety of occupations to see what they actually did all day and to discover how they felt about their jobs and their lives. From all these lives, *Working* emerges as an extraordinary mosaic that describes working in America and the effect that jobs have on the men and women who perform them with a clarity that is unusual.

Career Education Program, Houghton Mifflin Company, Boston, 1973, Volume I K-6, Charles W. Ryan; Volume II 7-9, Glenn A. Saltzman; Volume III 10-12, H. Eugene Wysong.

Sourcebook of resource materials and procedures useful to counselors, teachers, curriculum writers and others involved in career education. This series is designed to encourage young people to consider important work attitudes, investigate the world of work, learn about important career resources which are available, and actively retain and personalize information considered to be individually significant.

I(t) Work(s) Multi-Media Instructional Package, Lewis M. Abernathy, W. A. Luker, Susan White. I(t) Work(s), Inc., 1213 Piping Rock Lane, Denton, Texas 76201.

The Nutshell: An Introduction to Economics; Instability: The Ups and Downs of a Market Economy; Change: Economic and Social Dimensions; Marketability: Life and Career Planning; Workshop Guide, Teacher's Guide, Audio-Visual Materials. Monographs $2.00 single copy, $6.00 set of four. Informational brochure on other materials available.

ILLINOIS COUNCIL RECEIVES SECOND NSF GRANT

Dr. Mike MacDowell, Director of Illinois Council on Economic Education, instructs WOWEE participants during implementation session.

The National Science Foundation recently awarded the Illinois Council of Economic Education a $37,881 grant for a continuation of the World of Work Economic Education (WOWEE) program. This year's program in Illinois is designed to build on the existing program by utilizing the services of WOWEE trained teachers from 20 Illinois districts to train other teachers.

Last year WOWEE teachers identified 27 key economic concepts for integration into the existing curricula. For example, the concept of supply and demand was infused into the social studies curriculum of inner city Chicago schools. Division of labor was studied as a part of the business education classes in Macomb, and inflation and the consumer price index were explored by ninth grade students in Rockford.

Six leading school districts were chosen for key roles in this year's project to disseminate WOWEE concepts to additional Illinois school districts. Teachers from these six districts met on the Northern Illinois University campus for an intensive WOWEE session July 28 through August 8th. They were joined by a cadre of "disseminator" teachers from other school systems in close geographical proximity. During the 1975-76 academic year, teachers who participated in this summer session will conduct on-going WOWEE training in their home districts and in surrounding areas. Teachers and university center personnel will also participate in a tuition - waived graduate economics course. An extensive evaluation program to measure the effects of WOWEE on students of teachers involved in this year's program is also planned.

By June, 1976, the WOWEE program will be operative in over 40 school districts in Illinois. The Illinois program exemplifies the nation-wide thrust to make economic education relevant by exploring the relationships between work and economics in a citizen's life.

MRS. HERMAN STAFF ASSISTANT TO U.S. TREASURER

Mrs. Earlene Herman, former WOWEE coordinator and economics teacher at Northwest Classen High School, Oklahoma City, is now living in Washington, D.C. and is a staff assistant to U.S. Treasurer, Mrs. Francine Neff. Mrs. Herman, recipient of the first place $1,000 award in the Dollars For Oklahoma Teachers to Recognize Creativity in Economic Education, maintains a very active interest in economic education. In a recent letter, Mrs. Herman commented on a July luncheon meeting with S. Stowell Symmes, Director of Curriculum for the Joint Council on Economic Education, *"It was great talking about my favorite subject of economic education again!"*

WOWEE

NATIONAL WORLD OF WORK ECONOMIC EDUCATION CENTER

The Newsletter of the National World-of-Work Economic Education Center is published twice yearly at North Texas State University, Denton, Texas 76203. Written and edited in the N.T.S.U. Manpower and Industrial Relations Institute, it is distributed by the Institute and by the Joint Council on Economic Education.

Number 5, September 1975

Return Address

National Center World-of Work Economic Education
P.O. Box 13644 • North Texas State University
Denton, Texas 76203

Nonprofit Organization
U.S. POSTAGE
PAID
Denton, Texas
Permit No. 455

APPENDIX III

DEC 2 1976

JOINT COUNCIL ON ECONOMIC EDUCATION

1212 AVENUE OF THE AMERICAS / NEW YORK, NEW YORK 10036

MATERIALS REQUESTED FOR DISPLAY AT WOWEE CONFERENCES

AFL-CIO; 815 Sixteenth Street, N.W.; Washington, D.C. 20006

The Journal of American Labor
Job Satisfaction: An Elusive Goal
Financing the Schools
The Case for Federal Job Injury Standards
Up From the Sweatshop- Fifty Years of the Minimum Wage
The Economic Squeeze on the Worker
Full Employment: The Neglected Policy
Tax Subsidies that Export Jobs
A Modern Trade Policy for the Seventies
Sharing the Benefits of Productivity
Who is Unemployed: A National Profile
Welfare: The Program Nobody Wants
Wanted: A Rational Energy Policy
Labor Views the Economy, 1973
Unions, Economists and Reality
Consumers: The Uphill Fight
Public Investment: America's New Frontier
A Key Year in Collective Bargaining
Updating the World of Trade
Adjusting to Technological Change
American Federationist, May 1973 issue

American Institutes for Research; P.O. Box 1113; Palo Alto, Calif. 94302

The AIR Career Education News- Winter, 1973

College Placement Council; P.O. Box 2263; Bethlehem, Pa. 18001

Journal of College Placement- December 1971-January 1972 - Career Planning Courses Reprint

Council of Economic Advisors; Executive Office of the President; Washington, D.C. 20506

Economic Report of the President
Economic Indicator

Federal Reserve Bank of Kansas City; 925 Grand Avenue; Kansas City, Missouri 64198

Monthly Review, April, 1973
"Incomes of Men and Women: Why Do They Differ"
"Meeting Consumer Demand for Beef"

Federal Reserve Bank of Philadelphia; Philadelphia, Pennsylvania 19101

Automation
The Mystery of Economic Growth
The Price System

Federal Reserve Bank of Richmond; Ninth & Franklin Streets; Richmond, Virginia 23213

Monthly Review, May, 1973
"International Agricultural Trade & the U.S. Balance of Payments"
"Bank Affiliates and their Regulation"

Great Plains National Instructional Television Library; Box 80669; Lincoln, Nebraska 68501

Work is For Real
Career Guidance

McGraw Hill Films; 1221 Avenue of the Americas; New York, N.Y. 10036

World of Work- a description of the film series

National Planning Association; 1606 New Hampshire Ave., N.W.; Washington, D.C. 20009

Looking Ahead- November, 1972- Vol. 20, No. 7

New Jersey State Department of Education; Bureau of Occupational Research Development; Division of Vocational Education; 225 West State Street; Trenton, N.J. 08625

Feedback- Fall, 1972
Focus on Future Education
Placement: The Ultimate Test of a School's Commitment to Its Students

New Jersey Occupational Research and Development Center; Camp Kilmer, N.J. 08817

Why Career Education: The Facts
Simulations and Career Education

The New York Times; School Publications Department; 229 West 43 Street; New York, N.Y. 10036

Career Awareness Materials
School Weekly- College and Careers Report, February 26, 1973

National Center for Occupational Education; North Carolina State University at Raleigh; P.O. Box 5096; Raleigh, N.C. 27607

Synopses of Selected Career Education Programs; A National Overview of Career Education, 1972
A Monograph Series on Career Education

Center for Vocational & Technical Education; Ohio State University; 1900 Kenny Road; Columbus, Ohio 43210

A First Step Toward Career Education, Volumes I & II

Scholastic Magazines; 902 Sylvan Avenue; Englewood Cliffs, New Jersey 07632

Teachers Edition of Senior Scholastic- November 6, 1972

U.S. Department of Commerce Publications; Office of the Secretary; Washington, D.C. 20230

U.S.A. Statistics in Brief
Consumer Income Series- P-60 #81, November, 1971

U.S. Department of Health, Education & Welfare ; Baltimore, Maryland 21235

Career Education- Publication IOE 72-39
Career Education (Comments by Plato, Epicterus, etc.)
American Education
"Advancing Career Education"
"Careers on the Computer"
"Federal Funds"

U.S. Office of Education; Division of Vocational & Technical Education; Washington, D.C. 20202

Career Education: Description and Goals- July 29, 1971
Career Education: A Model for Implementation

U.S. Department of Labor; Bureau of Labor Statistics; Washington, D.C. 20212

Handbook of Labor Statistics
Occupational Outlook Quarterly
Jobs for Which Junior College, Technical Institute, or Other Specialized Training is Usually Required
Jobs for Which Apprenticeships are Available
Jobs: Which One For You?
Jobs for Which a High School Education is Preferred, But Not Essential

Jobs for Which a College Education is Usually Required
Jobs for Which a High School Education is Generally Required
Today's Word on Tomorrow's Jobs
Occupational Outlook for College Graduates
Skilled and Other Manual Occupations
Service Occupations
Professional and Related Occupations
Sales Occupations
Managerial Occupations
Jobs for the 1970's: Slide Series
Toward Matching Personal and Job Characteristics
Occupational Outlook Handbook in Brief
List of Current Occupational Outlook Materials
Occupational Outlook Brief: Health Service Occupations, 1972-73
Occupational Outlook and Tomorrow's Manpower Needs
Occupational Outlook Brief: Clerical and Related Occupations, 1972-73
Manpower Magazine, August, 1972 issue
Women & Work
Manpower Report of the President

ADDITION TO WOWEE MATERIALS SUPPLEMENT

Maine State Department of Educational and Cultural Services; Bureau of Vocational Education; Augusta, Maine 04330

Career Education and Maine Curriculum Guide, K-12

Educational Properties; 3001 Redhill Avenue; Esplanade 3; Suite 210; Costa Mesa, CA 92626

Career Education Digest

Council for Educational Development and Research, Inc.; Information Office; Suite 775; Lincoln Tower Building; 1860 Lincoln Street; Denver, Colorado 80203

D&R Report- Career Education Issue

National Planning Association; 1606 New Hampshire Avenue, N.W.; Washington, D.C. 20009

Looking Ahead, September, 1973 Issue (Vol. 21, No. 5).

SUPPLEMENT: MATERIALS REQUESTED FOR DISPLAY AT WOWEE CONFERENCES

Alice Independent School District; Alice, Texas 78332

Career Education - A Team Design - K-12

Chamber of Commerce of the United States; 1615 H Street; Washington, D.C. 20006

Career Education and the Businessman: A Handbook of Action Suggestions

California State Department of Education; Career Education Task Force.

Working Documents: Early Childhood Education - Pre K; Early Childhood Education - Kindergarten; Attitude Development - Grade 1; Educational Awareness - Grade 2; Career Exploration - Grade 4; Career Planning and Decision Making Skill Development - Grade 5; Adult Education - Career Exploration; Career Education Operation Plan; Career Education - Junior High; Career Orientation - Junior High; Counselor Module - Junior High; Vocational Education Module

District of Columbia Public Schools; Washington, D.C. 20004

A Plan for Career Development - Task Force Report on Vocational Education - May, 1969

Joint Council on Economic Education; 1212 Avenue of Americas; New York, N.Y. 10036

WOWEE Newsletters - Fall, 1972 and Spring, 1973
Progress in Economic Education - May, 1973
J.C.E.E.: What It Is, What It Does, Why It Does It
Pacific Business
The Economics of Youth Unemployment in the United States - Economic Topic Series

Lieurance, Dr. William: 475 East 55 Street; Kansas City, Mo. 64110

Issues: Teacher Curriculum Guide; Program Conceptualization; A Book About Me; Careers; Social Studies Units - Grades 4-8

McKnight Publishing Company; Dept. C11; Box 854; Bloomington, Ill. 61701

Discover What Career Education Can Mean to You

National Council for the Social Studies; 1201 16th Street, N.W.; Washington, D.C. 20036

"Career Education and Social Studies" in Social Education, October, 1973

Open Doors; Public Education Association; 20 West 40 Street; New York, NY 10018

Open Doors: A Guide To Business Resources Available in New York - 1970-71; 1971 Supplement; Fall, 1973
What's and Who's Cooking Our Food
Where It's At In Health Care
Open Doors - Newsletter, Summer, 1971
Finance City
Is There A Communications Explosion
Transportation
Exploring the Working World - Junior High School and High School

Public Affairs Committee; 351 Park Avenue; New York, NY 10016

Lekachman, Robert; Public Service Employment: Jobs For All

Pupil Personnel Services Station; Minnesota Dept, of Education; St. Paul, Minn.

Career Education Resource Guides: Value Identification; Satisfaction and Rewards of Work; Significant Others; Women and the World of Work; Social Contribution of Work; Life Styles and Work; Self-Concept Exploration

Science Research Associates; 259 East Erie Street; Chicago, Ill. 60611

Career Education Kits Available from SRA

Palo-Alto Educational Systems; 7119 First Avenue; Scottsdale, Arizona 85251

A First Step Toward Career Education - Volumes I and II

Division of Vocational & Technical Education; U.S. Office of Education; Washington, D.C.

Career Education - DHEW No. (OE) 72-39

U.S. Department of Labor; Manpower Administration; Washington, D.C. 20006

Bridging the Gap from School to Work
Carpenter
Looking Ahead to a Career
College Educated Workers, 1968-80

APPENDIX IV

Annotated Bibliography

SOME BASIC READINGS AND REFERENCES IN WORLD-OF-WORK ECONOMIC EDUCATION[1/]

(September 1973)

To what sources can teachers, guidance counselors, curriculum planners, and others turn for background analysis, information, and current data on subject matter relating to the world of work and the broader socio-economic environment in which man works and lives?

Publications included in this annotated bibliography were selected in response to the above question. Designed to meet the needs of a particular group, the bibliography has the following characteristics--

--*the readings and references deal with the content of world-of-work economic education rather than with teaching strategies and techniques*[2/]

--*the list is basic, not comprehensive*

--*it is for secondary school teachers, counselors, and curriculum planners*

--*although selected for the use of professional educators, much of the material can be read by mature junior high and senior high school students.*

The selections include current and historical information, statistical data, problem identification, and analysis that should prove useful in explaining to students some of the major dimensions of the work system and the broader economic and social world.

Some schools may want to use this bibliography as the basis for establishing a world-of-work economic education library. Costs of the publications are listed in the bibliography. Names and addresses of some representative private and public organizations actively concerned with manpower and economic problems are appended to the bibliography. These and other organizations are a good source of free and inexpensive materials that can supplement the basic bibliography.

1/ This bibliography is based on "A Basic Manpower Economics Library" developed in 1968 (revised 1970) by Robert L. Darcy and Phillip E. Powell and disseminated by the Joint Council on Economic Education and the M. H. Russell Center for Economic Education, Henderson State College, Arkansas.

2/ A major exception is Manpower and Economic Education (item A-11 in the bibliography), a nontraditional textbook which presents the content of world-of-work economic education in a format appropriate for junior and senior high school students.

SOME BASIC READINGS AND REFERENCES IN WORLD-OF-WORK ECONOMIC EDUCATION

Items in the bibliography are arranged into three groups on the basis of their estimated importance and value to secondary school teachers and counselors as well as curriculum planners. Group A lists publications considered to be essential for a basic minimum world-of-work economic education library. Group B includes items that are highly useful but not essential for a world-of-work economics library. Group C lists publications that are valuable but of less importance than items in the two higher-ranking groups.

GROUP A (total cost of these 11 items: $35.90)

1. Manpower Report of the President 1973, U.S. President and U.S. Department of Labor. Washington: U.S. Government Printing Office, March 1973. Paperbound, 253 pp., $2.85.

   Comprehensive and authoritative source of information, statistical data, and analysis concerning manpower trends and federal government policies dealing with manpower problems. Chapters on new roles for states and localities in manpower programs, population changes, and problems and opportunities of Spanish-speaking Americans; special section on black workers. Published annually.

2. Occupational Outlook Handbook, 1972-73 Edition, U.S. Department of Labor, Bureau of Labor Statistics. Bulletin 1700. Washington: U.S. Government Printing Office, 1972. Paperbound, 879 pp., $6.25.

   Detailed look at present and future occupational structure of the American economy, with more than 800 specific job descriptions. Revised edition is published every two years.

3. Occupational Outlook Quarterly, U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C. About 30 pp., two-year subscription, $3.00.

   Provides current information on employment trends and outlook, based primarily on research and statistical programs of the Bureau of Labor Statistics. Supplements and up-dates information in the Occupational Outlook Handbook.

4. The Future of Work, Fred Best (editor). Englewood Cliffs, New Jersey: Prentice-Hall, 1973. A Spectrum Book, S-293. Paperbound, 179 pp., $2.45.

   Collection ofreadings dealing with work and its relationship to human needs, technology, organizations, leisure, education, income, and the future.

5. Economic Report of the President 1973, U.S. President and Council of Economic Advisers. Washington: U.S. Government Printing Office, January 1973. Paperbound, 301 pp., $2.35.

   Detailed look at the U.S. economy, its recent performance, expectations for the near future, and policies advocated by the President to ensure continuing growth; more than 100 pages of up-to-date statistics. Chapter 4 is comprehensive analysis of "The Economic Role of Women." Published annually in January.

6. A Primer on Employment and Wages, 2nd Edition, Walter Galenson. New York: Random House, 1970. A Random House Primer in Economics, PR-3. Paperbound, 140 pp., $2.25.

   Brief introduction to the manpower market, wages and employment, and the problems of unemployment and poverty.

7. Handbook of Labor Statistics 1972, U.S. Department of Labor, Bureau of Labor Statistics. Bulletin 1735. Washington: U.S. Government Printing Office, 1972. Paperbound, 400 pp., $5.25.

   Statistical tables on U.S. labor force presented historically through 1971, with 25 pages of concepts, definitions, and data procedures. Published annually.

8. Education and Jobs, U.S. Department of Labor, Bureau of Labor Statistics, Washington, 1973.

   "Jobs For Which a High School Education Is Preferred, But Not Essential"

   "Jobs For Which a High School Education Is Generally Required"

   "Jobs For Which Apprenticeships Are Available"

   "Jobs For Which Junior College, Technical Institute, or Other Specialized Training Is Usually Required"

   "Jobs For Which a College Education Is Usually Required"

   A series of pamphlets to guide young people to jobs that match different levels of education and training. Each is 10 pages and available from regional offices of the Bureau of Labor Statistics.

9. Manpower, U.S. Department of Labor, Manpower Administration. Washington: U.S. Government Printing Office. About 32 pp. per issue; annual subscription of 12 issues, $5.50.

   Official monthly magazine of Manpower Administration which covers broad spectrum of programs and developments in job training and employment, including efforts to aid the disadvantaged and improve vocational education and research.

10. Review and Synthesis of Foundations for Career Education, Edwin Herr. Information Series 61, VT014805. Washington: U.S. Government Printing Office, March 1972. Paperbound, 82 pp., $1.00.

    Review and synthesis of the historical, philosophical, and theoretical bases for career education.

11. Manpower and Economic Education (A Personal and Social Approach to Career Education), Robert Darcy and Phillip Powell. Denver: Love Publishing Company, 1973. Clothbound and Paperbound, 380 pp., $7.00 and $5.00.

    Student materials for junior or senior high school which articulate information, ideas, concepts, and themes included in a world-of-work economic education program.

GROUP B (total cost of these 11 items: $38.45)

1. Work in America, Report of a Special Task Force to the Secretary of Health, Education, and Welfare. Cambridge: Massachusetts Institute of Technology Press, 1973. Paperbound, 262 pp., $2.95.

   Discusses the fundamental role of work in the lives of most adults, pointing out that jobs create problems that have serious effects on our society. Suggests reforms to alter this situation.

2. Economics (Principles, Problems, and Policies), 5th Edition, Campbell McConnell. New York: McGraw-Hill, 1972, 838 pp., $10.95.
   or:
   Economics, 9th Edition, Paul Samuelson. New York: McGraw-Hill, 1973, 917 pp., $11.50.

   Standard college introductory economics textbooks which can serve as encyclopedia-type reference.

3. Problems of an Industrial Society, William Faunce. New York: McGraw-Hill, 1968. Paperbound, 189 pp., $3.15.

   Sociological analysis of technological change, specialization of work roles, competition, social organization and the problem of alienation in industrial society.

4. The Economics of Youth Unemployment, Sar Levitan, Robert Taggart, and Frances Watkins. New York: Joint Council on Economic Education, 1973. Economic Topic Series. Paperbound, 18 pp., $1.25.

   The causes, patterns, problems, and possible solutions of youth unemployment are analyzed. Teaching strategies for material presented are included.

5. Technological Change (Its Impact on Man and Society), Emmanuel Mesthene. New York: New American Library, 1970. A Mentor Book, MY 987. Paperbound, 127 pp., $1.25.

   A brief account of the relationship between technological change and social change. Contains an annotated bibliography.

6. The Economics of Education (Conceptual Problems and Policy Issues), Richard Perlman. New York: McGraw-Hill, 1973. Paperbound, 151 pp., $3.95.

   A brief survey of the benefit-cost technique in evaluating educational investments, including implications for the individual and social decisionmaking. Issues in financing the schools are also discussed.

7. Monthly Labor Review, U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C. About 120 pp., annual subscription of 12 issues, $9.00.

   Journal of fact and analysis on economic and other forces affecting American labor force. Includes review of publications, developments, and data.

8. The U.S. Economy in 1980 (A Summary of BLS Projections), U.S. Department of Labor, Bureau of Labor Statistics. Bulletin 1673. Washington: U.S. Government Printing Office, 1970. Paperbound, 59 pp., 65¢.

   Projections for 1980 in areas of productivity, gross national product, employment by industry and occupation, and labor force with some implications of the projections.

9. The American Federationist, American Federation of Labor and Congress of Industrial Organizations. About 25 pp. per issue, annual subscription of 12 issues, $2.00; single copies may be requested. AFL-CIO Building, 815 Sixteenth St. N.W., Washington, D.C. 20006.

   Official magazine of AFL-CIO dealing with many aspects of current labor scene.

10. Education for the Urban Disadvantaged (From Preschool to Employment). A Statement on National Policy by the Research and Policy Committee, Committee for Economic Development, March 1971. CED, 477 Madison Avenue, New York, New York 10022. Paperbound, 86 pp., $1.50.

    Findings and recommendations from a study of how disadvantaged youth in urban areas are being prepared for employment.

11. Decision-Making and Vocational Development, Edwin Herr. Boston: Houghton-Mifflin, 1970. Guidance Monograph Series IV, Career Information and Development. Paperbound, 83 pp., $1.80.

    Interrelationships of decisionmaking and vocational development, effects of personal characteristics, and ways in which vocational development of students can be influenced.

GROUP C (total cost of these 11 items: $32.05)

1. Work in American Society, Seymour Wolfbein. Glenview, Illinois: Scott, Foresman, 1971. Series in Institutions and Modern Social Problems. Paperbound, 195 pp., $3.95.

   Factual background on the American worker and a review of issues concerning technology, work, and manpower programs.

2. Rich Man, Poor Man, Herman Miller. New York: Thomas Y. Crowell, 1971. Apollo Editions, A-289-G. Paperbound, 305 pp., $3.95.

   A study of income distribution in the United States which includes an examination of causal factors.

3. Black Americans (A Decade of Occupational Change), U.S. Department of Labor, Bureau of Labor Statistics. Bulletin 1760. Washington: U.S. Government Printing Office, 1972. Paperbound, 26 pp., 40¢.

   Chartbook showing occupational changes among black workers during the 1960-70 decade.

4. Sex in the Marketplace (American Women at Work), Juanita Kreps. Baltimore: John Hopkins Press, 1971. Policy Studies in Employment and Welfare 11, JH-EW-11. Paperbound, 117 pp., $1.95.

   A brief review of the literature on women's labor force activity and an examination of when women work, at what jobs, and under what circumstances.

5. The Technological Society, Jacques Ellul. New York: Random House, 1967. A Vintage Book, V-390. Paperbound, 499 pp., $2.45.

   An analysis of our technical civilization which presents the view that technology is a self-perpetuating, autonomous force destructive of human values.

6. Future Shock, Alvin Toffler. New York: Bantam Books, 1971. Paperbound, 561 pp., $1.95.

   Describes the various subcultures, lifestyles, and human relationships which have been formed and are being threatened by the rapid change taking place throughout society.

7. Self-Renewal (The Individual and the Innovative Society), John Gardner. New York: Harper and Row © 1963. Harper Perennial Books, 1971, P-224. Paperbound, 174 pp., 95¢.

   Emphasizes the need for continuous change in both the individual and institutions in our society. Suggests that if we are to grow both as individuals and as a nation, we must adopt an outlook on life and institutional arrangements stressing innovation and creativity.

8. Career Information in Counseling and Teaching, 2nd Edition, Lee Isaacson. Boston: Allyn and Bacon, 1971. 582 pp., $9.95.

   College textbook designed for courses in Occupational Information. Useful in helping students find career information and counseling them on vocational opportunities and educational planning.

9. Occupational Manpower and Training Needs, U.S. Department of Labor, Bureau of Labor Statistics. Bulletin 1701. Washington: U.S. Government Printing Office, 1971. Paperbound, 81 pp., 75¢.

   Covers 232 white-collar, blue-collar, and service jobs in which over half of all American workers are employed and for each shows employment in 1968, projected manpower requirements for 1980, ways in which workers receive training, and summary of statistics on numbers of persons currently completing training in the field.

10. Career Education (What It Is and How to Do It), Kenneth Hoyt and others. Salt Lake City: Olympus Publishing Company, 1972. Paperbound, 190 pp., $4.00.

    An analysis of the career education concept, its potential for society and the education system, and guidelines for the development of a career education program.

11. Pocket Data Book (U.S.A. 1971), U.S. Department of Commerce, Bureau of the Census. Washington: U.S. Government Printing Office, May 1971. Paperbound, 352 pp., $1.75.

    Compact and attractive compendium of tables and charts on basic U.S. economic and related data; published biennially.

* * *

Total cost of all 33 items listed in the bibliography -- Group A + Group B + Group C -- would be: $106.40.

SELECTED SOURCES OF FREE AND INEXPENSIVE MATERIALS

1. American Federation of Labor and Congress of Industrial Organizations, AFL-CIO Building, 815 Sixteenth Street, N.W., Washington, D.C. 20006.

2. Chamber of Commerce of the United States, 1615 H Street, N.W., Washington, D.C. 20006.

3. Committee for Economic Development, 477 Madison Avenue, New York, New York 10022.

4. Conference on Economic Progress, 1001 Connecticut Avenue, N.W., Washington, D.C. 20006.

5. Federal Reserve Bank of _____ (Boston, New York, Philadelphia, Richmond, Atlanta, Cleveland, Chicago, St. Louis, Minneapolis, Kansas City (Missouri), Dallas, San Francisco). Note: Various types of publications are available from the Federal Reserve Bank in each of the respective 12 Federal Reserve Districts.

6. Institute of Labor and Industrial Relations, P.O. Box B-1, Ann Arbor, Michigan 48106.

7. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, New York 10036.

8. The Conference Board, 845 Third Avenue, New York, New York 10022.

9. United States Department of Labor, Bureau of Labor Statistics, Washington, D.C. 20212. Note: Materials also are available from the eight BLS Regional Offices located in Boston, New York City, Philadelphia, Atlanta, Chicago, Kansas City (Missouri), Dallas, and San Francisco.

10. U.S. Department of Labor, Office of Information, 14th and Constitution Avenue, N.W., Washington, D.C. 20210.

11. U.S. Department of Labor, Women's Bureau, Washington, D.C. 20210.

12. W. E. Upjohn Institute for Employment Research, 1101 Seventeenth, N.W., Washington, D.C. 20036.

* * * * * * * * *

Single copies of this annotated bibliography can be obtained from:

Joint Council on Economic Education
WOWEE Project
1212 Avenue of the Americas
New York, New York 10036

APPENDIX V

LESSON PLAN - 1

CONCEPT: OPPORTUNITY COST

AREA: CONSUMER EDUCATION

Student will be given the following case study:
"Bill Mason is a sophomore at Westlake High School. He has two younger sisters. His father is manager of a local supermarket with a take-home pay of $850 a month. Mr. Mason has a small group health insurance policy and a $5,000 life insurance policy he bought himself, and said he could not afford to buy additional insurance. All of his monthly salary was used to meet current expenses including car and house payments, food, clothing, transportation, children's allowances, recreation and entertainment, vacation trips, and other bills.

One evening, Bill was talking with his father about insurance, which he was learning about in an economics course he was taking at school. He asked what kind of program his father had for their family. This started Mr. Mason thinking about how well he was planning for his wife and children. Since the family had always been in good health, Mr. Mason felt that additional health insurance and life insurance at this time was not essential. Maybe after he received a raise in salary and after his son was out of high school, he could afford to buy more insurance.

For discussion: Do you feel Bill's father is planning wisely for the welfare of his family? Although Mr. Mason's salary is not enough to buy insurance for all possible risks, what protection do you think he should make every effort to obtain at this time? Suppose Mr. Mason was seriously injured and could not return to work for at least a year. What would the family do? How might this situation affect his son? What must he give up to make sure his family is protected?"
(Policies for Protection, p. 16).

Class discussion would follow about questions asked at the end of the case study.

EVALUATION:

Given a problem involving expenditure of funds or a case study, student will be able to decide what opportunity costs are involved.

RESOURCES:

Policies for Protection, Institute of Life Insurance (New York: a publication of the Institute of Life Insurance, 1973).

LESSON PLAN - 2

CONCEPT: SCARCITY

AREA: CAREER EDUCATION

ACTIVITY:

Role playing to show how competition becomes a factor when jobs are scarce.

CHARACTERS: Four applicants compete for one opening for a cashier at the local McDonald's Restaurant. One person plays the role of manager. Eight persons are customers. The remainder of the class participate by rating the applicants on a Personnel Evaluation Form.

SCENE: McDonald's Restaurant with menu and price list on blackboard.

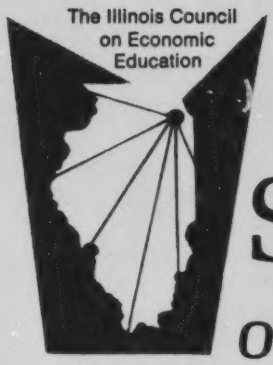
PROCEDURE: Applicants introduce themselves to the manager, questions each to ascertain their reasons for wanting the job, past experience, etc. The manager gives each a tryout by having applicant serve two customers: greeting customer, taking order, calling out order to order-fillers, computing bill, and making change.

PERSONNEL EVALUATION FORM
(Rank 1-4 with 4 being best)

NAME OF APPLICANT	PERSONAL APPEARANCE	SPEAKING SKILLS	READING SKILLS	MATH SKILLS	TOTAL

EVALUATION: Students will be able to list two characteristics, which are important in applying for a job, for each of the categories listed in the Personnel Evaluation Form.

APP. VI



A Study of the

STATUS *of* ECONOMIC EDUCATION *in the* ILLINOIS SCHOOLS (K-12)

By Dr. Edmond T. Parker • *$1.50*

FOREWORD

Economic education is a matter that is of vital concern to every American citizen, be he a businessman, professional, wage-earner, teacher, — or unemployed. Proper and full use of our national resources, both human and material, is essential to the maximum well-being of our nation.

Our free enterprise economic system is indeed a most complex one that is governed by a myriad of decisions at many levels of the social and economic structure. Because of this complexity, the most accessible bases for drawing conclusions or making decisions are ignorance and emotion. All too often they are seized upon in the absence of understanding.

The Illinois Council on Economic Education has, for many years, made attempts at improving economic understanding in the schools, colleges, and and universities of Illinois. Until now, we have not had a comprehensive study which showed us either the dimensions of the problem or furnished us with a guide for allocating our resources in a scientific manner. "The Status of Economic Education in the Illinois Schools (K-12)" provides us with a large body of useful information.

As you will note, the effectiveness of economic education in Illinois is far from encouraging and the task of remedy is substantial. At the same time, however, the study points out those areas where attacks upon the problem will be most effective. The Illinois Council on Economic Education has the organization, expertise and cooperation of many persons and organizations to meet this challenge, provided adequate financial support is available.

While many efforts are in progress to improve economic education, the real criteria of success is what happens in the classrooms and in the minds of the young people in those classes. The Illinois Council on Economic Education is the only organization in the state which has an active, in-the-school-classroom program on a year-round basis. Our efforts are immeasurably aided by the excellent cooperation of the Office of the Superintendent of Public Instruction, educational associations, business, industry, labor, agriculture, institutions of higher learning, and the public, parochial and private schools.

Dr. Edmond T. Parker and the members of his dissertation committee are to be commended for the high caliber of this study. The names of some of the people who were of special assistance are listed on the acknowledgment page.

I hope you will take the time to read this report and that you will find it useful to the extent that you will wish to lend the Council your support in undertaking this enormous task.

William C. Bradford, *President*
Illinois Council on Economic Education
Associate Dean of Faculties
Northwestern University

TABLE *of* CONTENTS

Page

I. Acknowledgments 2

II. Introduction 3

III. Meeting Needs: A Rationale 4

IV. Procedures 4
Notes on sample selection, questionnaire design, and data analysis.

V. Economic Education in Illinois Schools: A Description 4
Summaries of findings in areas of concern to economic education.

VI. Inference 12
Relationships in the data which proved to be of statistical significance.

VII. Summary 13
Implications of the study on future plans to revise economic curricula.

VIII. Moving Forward 14

IX. Bibliography 15

I. ACKNOWLEDGEMENTS

Professor Lee F. Anderson, Dissertation Committee, Department of Political Science, Northwestern University

Dean William C. Bradford, President of the Council and Associate Dean of Faculties, Northwestern University

Professor Remi P. Clignet, Dissertation Committee, Department of Sociology, Northwestern University

Mr. Fred Forester, Computer Programmer, Northwestern University

Mr. Andrew Garbacz, Computer Programmer, Northern Illinois Gas Company

Dr. Theral T. Herrick, Executive Director, Illinois Council on Economic Education

Mr. Carl E. Horn, Assistant Vice President, Revenue Requirements Department, Illinois Bell Telephone Company

Mr. Herbert Kantor, Illinois Institute of Technology Research Institute

Professor John R. Lee, Dissertation Committee, School of Education, Northwestern University

Mr. Raymond Lewis, Public Relations Department, Illinois Bell Telephone Company

Dr. Ralph E. Lundgren, Director of Research, Office of the Superintendent of Public Instruction, State of Illinois

Mr. Harry Page, Assistant Superintendent of Public Instruction, State of Illinois

Mr. Ray Page, Superintendent of Public Instruction, State of Illinois

Mrs. Grace Smedstad, Illinois A.F.L.-C.I.O. Staff Representative, Labor Welfare Service Department

Mr. Philip Spielmacher, Southern Illinois University

Mr. E. E. Wegener, Coordinator of Governmental Relations, Northern Illinois Gas Company

II. INTRODUCTION

A Study of the Status of Economic Education in the Illinois Schools

By Dr. Edmond T. Parker

We have known the problem for years. Economic education in Illinois, as elsewhere, is ailing. Now, for the first time, we have separated fact from folklore, and have identified some specific measures which will clearly improve the situation. We need only to act upon them.

For instance, did you know that . . .

— A major problem appears to be that teachers do not **perceive** the economic content of the subjects they teach.

— The most promising ways to achieve better economic curricula are in-service training and college courses designed especially for teachers.

— Even though economic teachers usually have some formal economic education, there is still a great need to improve the preparation of teachers in many grades and subjects.

— Teachers with special characteristics do not have to be sought out to institute curriculum changes in economic education.

— Many teachers are not using the latest and most desirable resources for teaching economics.

— Teachers are not using contemporary teaching approaches, despite their availability and the recognized need for such methods.

— In-service training opportunities are needed for a majority of teachers and such training is particularly lacking in the elementary grades, small school districts, and in some private and parochial schools.

III. MEETING NEEDS: *A Rationale*

In 1962, Secretary of Commerce Luther Hodges prodded educators with this inquiry: "How can we choose a course so the United States can grow and prosper if most of our people are, to put it bluntly, economic boobs?" The candor of his remark startled some, but the level of economic education in the United States has not risen appreciably since that time. Many of the problems which beset it in years past persist today.

There continues to be a widespread concern about the economic illiteracy of the American people. And for good reason. Economics is not something that can be taken like vitamins once in the morning and forgotten for the rest of the day. Economic principles and decisions shape each citizen's life in big and small ways, from determining what will be on tonight's dinner table to tomorrow's headlines. Economic understanding is essential for responsible citizenship.

Along with the rest of the nation, Illinois has sorely needed information about the status of its economic education programs.

This need has been made all the more urgent by the 1968 law requiring the teaching of consumer education in Illinois public schools.

Status studies of economic education have been made in a few states, along with some valuable field studies of evaluative techniques, course development, and methodology. But there still are a number of needs to be met before adequate research exists.

In gathering descriptive statistics on the status of economic education in Illinois, this study has helped fill in features of the national picture established by previous investigations. But it also went further than any other. It collected data not only about elementary schools, but about each grade level; not only about economics courses, but about other high school courses in social studies, business, and home arts. It surveyed all grades — kindergarten through twelfth — in public, parochial, and private schools. These were all new ground for status studies in economic education.

Further, inferential statistics were applied to the data to isolate several variables which might make a difference in economic education and to provide planners with data about more broadly applicable relationships.

IV. PROCEDURES

The generalizations in the study are based on a usable return of more than 85 per cent from a randomly chosen sample of 4,664 teachers and administrators throughout the state. Respondents were chosen from a stratified, randomized sample of 114 public school districts and 143 parochial and private schools.

Data was collected with two questionnaires — one for teachers and one for administrators. The teacher questionnaire — which provided the bulk of the data — had 189 response items. The administrator questionnaire had 45 response items designed to obtain data less readily available to the classroom teacher.

The good return is attributable to several factors. There was active and visible support from state and local educational officials from the beginning. All research materials were signed by both the Superintendent of Public Instruction for Illinois and the president of the Illinois Council on Economic Education. The answer sheet was easy to use and could be read by an optical scanner. Distribution, control, and follow-up procedures were thorough — and persistent.

Extensive use of computers eased the problems of data compilation and analyses. Because of the mass of data accumulated, both the breadth and depth of the study would have been severely limited without this treatment.

V. ECONOMIC EDUCATION IN ILLINOIS SCHOOLS: *A Description*

Since its reactivation in September, 1967, the Illinois Council on Economic Education has been beseiged with requests for information that was nowhere available. There were no statistics on any aspect of economic education in the state until mid-1968, when the Office of the State Superintendent of Public Instruction completed a survey on consumer education.

To help remedy this situation, this study drew a detailed picture of economic education in Illinois

by investigating seven topics:
(1) teacher background in economics; (2) in-service experiences of teachers; (3) resources used in the classroom; (4) teaching methods; (5) testing of economics understandings; (6) felt-needs for the improvement of economic education; and (7) extent of economic topics taught, by grades and subjects.

Implicit in this effort was the hope to improve economic education and literacy not only in Illinois but elsewhere. Overall, the study revealed economic education in Illinois to have some promising features, but also some discouraging ones.

(1). While the majority of Illinois teachers have taken some formal course work in economics, there is a great need to improve the economic preparation of teachers in certain grades and subjects if recommended standards are to be met.

Of the total sample of teachers, 39.1 per cent had never taken a course in economics, 33.6 per cent had taken between one and five semester hours, and 27.3 per cent had taken six or more semester hours.

All teachers can benefit from some formal instruction in economics simply because there is economic content in nearly every course offered.

Primary grade topics such as the home, the family and the community all involve economics. So do high school courses in social studies, business, and home arts. It remains the teacher's duty to explain this content in terms students understand. But without adequate background in economics, teachers may unwittingly pass over relevant concepts.

In 1961, the National Task Force on Economic Education recommended a minimum of six semester hours in economics for all high school social studies and business teachers, and 18 hours for economics teachers. Many of those interested in the field recommend a minimum of three hours for elementary teachers. Accepting these as reasonable measures, more than half of the responding elementary school teachers meet the three-hour standard. Almost two-thirds of seventh and eighth grade teachers meet the criterion — a satisfying finding since economic content is greater in these grades.

Ninth-grade junior high school teachers are a pleasant surprise. More than half have taken six hours of instruction, the high school standard.

In high school, twelve courses were studied. More than half of the teachers of home economics, United States history, economics, general business, business law, consumer economics, and civics had six or more hours in economics. On the other hand, there are problems with world history, geography, problems of democracy, and family living teachers. But the sample was limited and inferences must be made with caution.

The teacher of the economics course is, of course, a prime concern of those interested in economic education. In Illinois, economics teachers had the most extensive preparation in economics of any group. If four courses in economics were considered minimum preparation for teaching economics, 43.8 per cent of economics teachers met the standard. The Task Force criterion of eighteen hours was met by 31.7 per cent. And, importantly, many of these teachers had taken courses fairly recently. There is some debate whether the economics teacher should be a social studies or a business teacher, but the survey revealed there are teachers with extensive economic background in both fields.

TABLE 1 — Number of hours taken in economics by teachers in each grade and subject field. *(Percent)*

Grade	No. of Semester Hours 0	1-5	6+
K	44.8	35.0	20.2
1	48.7	36.0	15.3
2	48.2	34.9	16.9
3	44.3	39.1	16.6
4	43.7	34.5	22.8
5	41.5	31.6	26.9
6	41.5	33.7	24.8
7	36.2	32.6	31.2
8	35.4	29.6	35.0
JHS Home Ec.	18.7	18.7	59.6
JHS S.S.	17.2	27.6	55.2
JHS Other	40.0	6.7	53.3
Home Ec.	14.1	35.2	50.7
W. History	28.6	33.9	37.5
U.S. Hist.	22.6	27.4	50.0
Geography	25.0	56.3	18.7
P.O.D.	39.1	26.1	34.8
Economics	17.1	19.5	63.4
Fam. Liv.	13.6	54.5	31.9
Gen. Bus.	4.8	22.2	73.0
Bus. Law	11.1	16.7	72.2
Cons. Ec.	20.8	29.2	50.0
Civics	7.1	28.6	64.3
Other	22.8	26.1	51.1

Since most teachers can only take a limited number of economic courses, the Task Force recommended that university economic departments design special courses for teachers. At the time of this study, however, only 17 per cent had taken such a course.

(2). Despite the value of in-service education, very few Illinois teachers have taken any in-service economic training — particularly those in elementary grades, in small districts, and in private or parochial schools.

Of all respondents, only 4.1 per cent have attended a seminar on economic education lasting a week or more, and only 7.5 per cent have attended a conference, workshop, or seminar of from one to three days' length; only 6.5 per cent had in-service training in economics provided by the local school system.

In-service education has always been a practical tool for up-grading teacher education. Moreover, it provides opportunities to guide teachers to perception and appreciation of the economic content of courses they teach. In-service education has been offered by Illinois universities and colleges for some time. Similarly, the Superintendent of Public Instruction encourages instruction in economic education. But the scope and scale evidently are not nearly as broad as they should be.

The participation rate found in Illinois is disappointing. Less than 15 per cent of all teachers participated in any kind of institute. Smaller school districts, including private and parochial elementary school districts, had particularly poor showings. All presented the opportunity for in-service education to less than 3 per cent of their teachers.

This is especially unfortunate, since most teachers with in-service experience felt additional work changed their teaching of economic concepts in several ways. Mentioned most often were changes in the **resources** used, in the **content** of their courses, and in the **method** used to teach economic concepts.

Better use should be made of this method for improving education.

(3). In spite of availability of contemporary teaching materials, most teachers still rely heavily on the traditional textbook, lecturer and discussion.

Teachers use fewer progressive techniques to teach economic topics than other subjects. Although they are available, few schoolroom aids are used to make economics more exciting and easier for students to grasp. This would not be so bad if teachers perceived all the economic content in their courses, but they do not. So economics may not only receive little attention from the instructor, but also must compete with subjects which are taught with more memorable methods.

TABLE 2 — Use of selected media in teaching economic content *(Percent)*

Medium	Used... Frequently	Occasionally	Seldom	Never
Filmstrips	14.3	25.0	20.8	39.9
Films	16.0	35.9	19.6	38.5
Transparencies	5.0	10.7	17.8	66.5
Film loops	1.4	2.6	5.6	90.3
Simulations	7.3	17.8	19.9	55.0
Posters & charts	10.4	22.9	23.3	43.4
Newspapers	16.0	25.5	20.4	36.0
Maps	15.2	25.9	20.8	38.1
Field trips	3.2	12.1	26.7	58.0
Classroom aids	9.6	21.0	25.2	44.3
Wall charts	10.5	19.9	25.6	44.1
Slides	2.3	9.2	13.7	74.8
Programmed materials	3.1	6.5	11.4	79.0
Television	3.8	10.5	15.8	69.9
Textbooks	34.1	18.7	12.4	34.8
Speakers	2.3	9.3	17.9	70.4

It is not for a lack of alternatives offered that so few are used. State education councils, labor unions, farm and business groups, independent teaching aid companies: All offer a variety of techniques which would readily enhance the classroom presentation and understanding of economics.

Only 158 respondents used any paperbacks — which seems grim in this day of the disposable book. More than half never went on a field trip. More than one-third were unaware of the services offered by the Illinois Council on Economic Education, and 39 per cent did not even know about the Joint Council on Economic Education.

Adding to the problem is meager use of student — or teacher — constructed teaching aids, items common for other subjects.

Elementary school teachers used printed materials more than would be expected, but still only to a modest extent. And about 25 per cent of high school teachers reported using magazines and newspapers frequently.

Comments on questionnaires revealed that many teachers did not know these sources of help existed. Certainly agencies interested in promoting economic literacy should advertise their willingness to help more effectively.

(4). Although Illinois teachers perceive the inadequacies surrounding economic education, they are not employing many new teaching approaches to help the existing situation.

More than 50 per cent of teachers using any materials use only a textbook or related items. Less than 10 per cent ever use such contemporary teaching methods as classroom role-playing, community surveys, or even student research.

Generally teachers rely on the most traditional approaches to teach economic subject matter. And they do so in spite of their own feelings that present textbooks are inadequate and that economics is difficult to get across to students. This should be all the more reason to explore new techniques which would help get these "difficult" concepts across.

TABLE 3 — Use of selected teaching techniques contrasted *(Percent)*

	Used Frequently	Never Used
Reading and discussion	51.4	19.3
Lecture and discussion	30.8	29.6
Field trips	2.7	53.2
Bulletin boards and displays	20.5	27.0
Resource people brought to class	3.0	64.8
News media	17.2	29.6
Socio-dramas, role-playing simulations, or "gaming"	7.1	52.7
Study of personal "problems" such as budgets	6.9	55.2
Community surveys	1.1	79.8
Student reports, panels, debates	9.0	51.5
Student committees	4.9	61.0
Individual student research	9.7	50.2
Group research by students	5.8	59.1
Testing	14.9	51.7

The traditional approach is characterized by reliance on textbooks. Of all responding teachers, 11.1 per cent used just a basic text alone to teach economic content; 9.3 per cent used a work book along with the text; and 29.8 per cent used reference materials with the text.

There are, however, some departures from textbook format. It was heartening that some teachers had the initiative to develop their own materials. One out of four responding teachers reported doing something in this area, and a third of these people indicated a willingness to make a copy available.

Use of multiple texts were listed by 10.7 per cent of the teachers, and 2.2 per cent used curriculum project materials.

Worthy of note is the acceptance of Lawrence Senesh's "Our Working World" materials, developed for the first three grades. Of the 1,110 responding teachers in these grades, 168 reported using these materials. However, less than half of the teachers use the materials as their basic texts.

Curriculum projects involved 61 teachers. Those teachers who identified their projects were generally involved with local district or college class projects. Illinois also has seven school systems involved in D.E.E.P. (Developmental Economic Education Program), a nationwide attempt to involve local school systems in developing and testing materials in economic educaction.

Each of these techniques — teacher-constructed resources, "Our Working World," and curriculum projects — is a departure from the most traditional textbook approach. Other departures will also have to be made if teachers are to overcome some of the present problems they perceive in teaching economic content.

(5). Many teachers did not test their students at all for economic understanding which might indicate that economic context is unimportant in those teachers' eyes.

More than one-third of all teachers in the sample did not test for economic concepts in the courses they teach. Of all respondents, 36.6 per cent reported using some kind of standardized list.

The only useful finding of questions on testing techniques was that many teachers did not even try to measure understanding of economic topics. Since teachers are likely to test for the understandings they want their students to have, this non-testing could reflect teachers' lack of concern.

A useful research tool in economic education is the standardized Test of Economic Understanding designed for the secondary school. Some effort is under way to expand its use in Illinois, and since 36.6 per cent of the economics teachers in the sample reported using standardized tests — which can be presumed to be the Test of Economic Understanding — a good start has been made.

(6). Most teachers are acutely aware of problems afflicting economic education, and express definite preferences regarding methods for improving the existing conditions.

Nearly 60 per cent of all teachers feel there is a need to broaden their own backgrounds in economics, and see in-service education and teacher-oriented college courses as the best ways. Nearly 50 per cent wanted more explicit treatment of economic content in their textbooks, 70 per cent wanted correlated audio-visual resources, and 64 per cent wanted guidance in teacher manuals.

Teachers are most likely to adopt changes which reflect their own felt needs, so this study made an effort to have teachers identify them. Since administrators have a strong hand in starting new programs, their opinions also were sought.

TABLE 4 — Felt needs in order of priority by teachers and administrators.

Item	Teacher Ranking	%	Administrator Ranking	%
Time for teacher planning during the school day	1	57.9	5	41.1
Funds for materials and equipment	2	52.3	1	58.3
College-level economics courses developed especially for teachers	3	51.3	3	45.4
In-service education for teachers	4	46.1	2	51.2
Better curricula	5	44.0	4	42.6
Pre-service education	6	32.3	6	40.9
Summer workshops and institutes	7	29.1	7	30.8
Greater board of education interest	8	25.3	9	21.4
Support from local business and civic leaders	9	23.3	8	22.4
Better cooperation between administration and teaching staff	10	23.3	11	17.4
Elimination of community pressures to teach certain points of view	11	21.7	13	15.7
Better supervision	12	12.5	12	16.3
Consultative visits	13	12.1	10	17.6

The responses underscore the realities affecting educational change: the present workloads for teachers and the unimaginative teaching tools imposed by many school systems are serious blocks to educational creativity. Lack of time and funds severely restricts opportunities even the most resourceful teachers have.

After increased time and funds, teachers feel a strong need for broadening their economic background, and they wish to do this primarily through college courses developed for teachers and in-service education. Notably, 58.8 per cent of economics teachers indicated teacher-oriented economics courses as essential.

The high ranking of improved curricula points up the dissatisfaction teachers have with present treatment of economic topics. Teachers not only want more items dealing with economic topics, but they desire materials which treat economics explicitly. Teachers obviously feel more comfortable with materials which present economic concepts in a lucid and forthright manner.

Substantiation of this is found in teachers' views on textbooks. When they were asked how their textbooks could be changed, 49 per cent reported wanting more explicit treatment of economic content; another 21.4 per cent preferred separate units on economics; and 11.6 per cent wanted separate chapters on economics. Further, 70 per cent wanted correlated audio-visual resources, and 64 per cent desired guidance in teacher manuals.

(7). Grade by grade or subject by subject, many teachers do not treat economic topics despite the implicit economic content in their courses.

On a checklist of 30 economic topics, 14 were given no treatment at all by more than 50 per cent of all teachers. Only two topics were given "great emphasis" by more than 20 per cent of respondents.

It was essential to determine which topics and concepts basic to understanding the economy are being emphasized at various grade levels, and which are being ignored. The extent to which teachers recognize these topics reflects the extent to which they can be taught. A teacher cannot teach something he does not realize is in his curriculum.

In any event, with the exception of the treatment of a very few topics, economic education in Illinois schools has vast room for improvement.

Over-all, the most neglected group of topics is that dealing with consumer economics. This is a

TABLE 5 — Overview of treatment of economic topics *(Percent)*

	Great Emphasis	No Treatment
Scarcity: The conflict between wants and resources	19.4	28.1
Basic resources involved in production	25.0	24.5
Significance of specialization: (geographic, occupational, technological)	19.5	32.8
Basic characteristics of the free enterprise system	16.7	44.7
Role of incentives, competition, and markets	12.4	47.2
Role of governments in all economics	14.1	45.1
Money and banking	12.4	38.6
National income and gross national product	4.8	73.8
Sources of economic growth	9.6	44.9
Factors affecting, and plans for maintaining economic stability	7.3	62.9
Role of the family in the economy	25.4	22.3
Role of big and small business in the economy	9.2	52.4
Role of labor unions and collective bargaining in the economy	7.7	67.9
Agricultural problems and suggested solutions	10.0	46.5
Problems of economic insecurity and hardships faced by individuals and groups	16.5	34.2
Distribution of income	8.3	53.0
International economic relationships and problems	6.2	63.4
Comparisons between various types of economic systems in the world	10.4	59.6
Budgeting	11.0	55.8
Consumer credit	11.5	66.5
Consumer buying	15.0	48.6
Insurance	7.7	73.5
Housing	11.6	45.2
Taxes	11.0	46.8
Savings and investments	9.9	54.2
Advertising	8.2	56.0
Consumer information and protection	9.5	63.0
Labeling and packaging	9.0	57.9
Role of the consumer in the economy	11.6	51.4
Consumer and the law	5.4	70.9

serious deficiency, particularly with the law requiring consumer education in all public schools. Since this area brings economic concepts down to a personal basis, a good foundation here could pave the way for better understanding of more advanced topics.

Viewing the elementary school separately, very few teachers reported heavy emphasis on any economic topics. But it is clear that there exists a sound base in elementary schools from which to work for more effective economic education, if only there were an effort to extend and improve it.

TABLE 6 — Treatment (great and some emphasis) by 50% or more of elementary teachers of economic topics, grade by grade.

Topic	50% or more								
	K	1	2	3	4	5	6	7	8
Scarcity: The conflict between wants and resources		X	X	X	X	X	X	X	X
Basic resources involved in production		X	X	X	X	X	X	X	X
Significance of specialization: (geographic, occupational, technological)	X		X	X	X	X	X	X	X
Basic characteristics of the free enterprise system					X	X	X	X	X
Role of incentives, competition, and markets					X	X	X	X	X
Role of governments in all economics					X	X	X	X	X
Money and banking	X	X	X	X				X	X
National income and gross national product									X
Sources of economic growth					X	X	X	X	X
Factors affecting, and plans for maintaining economic stability							X	X	X
Role of the family in the economy	X	X	X	X	X	X	X	X	X
Role of big and small business in the economy						X	X	X	X
Role of labor unions and collective bargaining in the economy								X	X
Agricultural problems and suggested solutions					X	X	X	X	X
Problems of economic insecurity and hardships faced by individuals and groups			X	X	X	X	X	X	X
Distribution of income						X	X	X	X
International economic relationships and problems							X	X	X
Comparisons between various types of economic systems in the world							X	X	X
Budgeting									X
Consumer credit									X
Consumer buying							X		X
Insurance									
Housing			X	X	X	X	X		
Taxes								X	X
Savings and investments									X
Advertising					X				X
Consumer information and protection									X
Labeling and packaging									X
Role of the consumer in the economy							X	X	X
Consumer and the law									X

Realistically, though, the number of teachers who emphasize all these topics is so small that one cannot say this provides a glowing picture of economics in the elementary grades.

Looking at high school data, some gaps show immediately: national income, international economic issues, and comparative economic systems are fairly well ignored. The businessman — big and little — the unionist, and the farmer, share a similar fate. Consumer economics is not neglected but it is largely relegated to a few subjects.

TABLE 7 — Treatment (great and some emphasis) of economic topics by 75% or more of junior and senior high school teachers, presented by subject field.

Topic	1	2	3	4	5	6	7	8	9	10	11	12	13
Scarcity: The conflict between wants and resources	X	X	X	X	X	X		X	X	X	X	X	
Basic resources involved in production	X	X	X	X	X	X	X	X		X	X	X	X
Significance of specialization: (geographic, occupational, technological)				X	X	X		X		X	X	X	X
Basic characteristics of the free enterprise system		X		X	X	X	X	X		X	X	X	
Role of incentives, competition, and markets		X		X	X			X		X	X	X	X
Role of governments in all economics		X		X	X		X	X		X	X	X	X
Money and banking			X		X			X	X	X		X	X
National income and gross national product								X		X			
Sources of economic growth					X	X	X	X		X		X	X
Factors affecting, and plans for maintaining economic stability		X		X	X			X		X		X	
Role of the family in the economy	X		X					X	X	X		X	
Role of big and small business in the economy					X			X		X		X	
Role of labor unions and collective bargaining in the economy		X		X	X		X	X				X	
Agricultural problems and suggested solutions				X	X	X		X				X	
Problems of economic insecurity and hardships faced by individuals and groups		X	X	X	X			X			X	X	X
Distribution of income		X	X	X	X			X	X	X		X	X
International economic relationships and problems		X		X	X								
Comparisons between various types of economic systems in the world				X	X			X					
Budgeting	X	X	X						X	X		X	X
Consumer credit	X	X	X					X	X	X		X	
Consumer buying	X		X		X			X	X	X		X	
Insurance			X						X	X		X	
Housing	X		X						X			X	
Taxes			X					X	X			X	
Savings and investments			X					X	X			X	
Advertising	X		X					X	X	X	X	X	X
Consumer information and protection	X		X					X	X	X	X	X	X
Labeling and packaging	X		X					X	X	X	X	X	
Role of the consumer in the economy	X		X					X	X	X	X	X	
Consumer and the law			X							X		X	

Legend for columns

1. Jr. High Home Economics* **
2. Jr. High Social Studies**
3. Home Economics
4. World History
5. U.S. History
6. Geography*
7. Problems of Democracy*
8. Economics
9. Family Living*
10. General Business
11. Business Law*
12. Consumer Economics
13. Civics

*sample smaller than 25
**9th grade only

Consumer economics topics get extended treatment in several courses: Consumer Economics, General Business, Home Economics, and Family Living. Since Consumer Economics is new among course offerings — and still experimental in some schools — this content is undoubtedly due as much to the background of teachers as to the nature of the course itself. In view of their consumer orientation, it was surprising that these courses did not emphasize advertising, the consumer and the law, or labeling and packaging to any great extent. Surely they warrant considerable attention, but they do not receive it.

General economic topics receive fairly broad coverage in General Business, U. S. History, Consumer Economics, and, of course, Economics. This report is encouraging because U. S. History is one course every student takes.

On the other hand, some courses give little attention to any economic topics. Two which stand out prominently are world history and problems of democracy. Both of these courses ignore economics to a very great extent. It is difficult to see how the progress of man could be viewed without reference to occupational specialization, distribution of income, or the role of business and labor unions — to mention a few topics. Problems of democracy presents a complex picture. It is taught in a variety of ways with much disparity in subject manner.

Geography teachers ignored more economic topics than any other high school group, despite the orientation of so many textbooks toward economic geography.

The number of students reached by an economics course is very small. Few schools make the course mandatory, and in schools where it is elective, usually only a small percentage of students take it. With this in mind, preoccupation with only the economics course might distract one from providing for economic understanding throughout elementary and secondary school curricula.

VI. INFERENCE

For those who hope to improve economic education, it is critically important to know exactly where to direct the effort. Much time can be, and has been, spent on programs which never touch upon the heart of the problem.

To avoid this waste, this study applied inferential statistics to a number of possible relationships in order to identify those which significantly affect the teaching of economics.

Data obtained by this inferential analysis should be of greater applicability than the previous section of descriptive traits. It is likely that the relationships which have been considered, controlled, and treated statistically for Illinois teachers should apply to teachers elsewhere. Statistics used were one-way analysis of variance, analysis of covariance, or chi-square, as appropriate.

Increasing the number of courses in economics and/or the number of in-service training sessions which a teacher takes pays off in more classroom treatment of economic topics.

It is essential to know whether increasing a teacher's formal background in economics pays off in increased treatment of economic topics, whether providing in-service education helps, and whether in-service experience has a positive relationship to a teacher's treatment of economic topics which is independent of the number of semester hours he has had in economics. The potential importance of such knowledge to those hoping to devise programs for improving economic education is evident.

To test for these possible relationships, each variable was controlled — formal economics courses, in-service experiences, and treatment of economic topics — and inferential statistics applied. The results were clear.

There was found to be a very high positive relationship between the number of hours taken in economics and the topics covered. Of course, the relationship went in the other direction, too: the fewer hours in economics, the fewer topics covered.

Further analysis compared all those with in-service experience in economics to those without. As was expected, those with in-service experience were found to give greater emphasis to more topics and neglect substantially fewer than teachers without this experience. This was found to be true no matter how much previous training the teacher had received in economics.

There is little substance to the belief that older teachers are out of touch with economic education or that they neglect economic topics more.

Worries that older teachers have weaker backgrounds than young teachers and that special effort

is needed to bring them up to the level of others are unfounded. Analysis did not show any marked relationship between the number of years service a teacher has and the extent of treatment he gives to economic topics.

There was some relationship between the number of years experience and the number of hours in economics a teacher had taken and his participation in economic in-service education. This is not strange. Experienced teachers are likely to have had more opportunities for in-service education. Accordingly, younger teachers were likely to have had fewer hours in economics and fewer exposures to in-service training.

The important point is discrediting the notion that older teachers cannot be expected to have the background to teach economic content. Sometimes it is assumed that taking course work in economics is something new. That does not seem to be the case. Experienced teachers have "picked up" economics in addition to their degrees and their teaching credentials regardless of the practices of the institution where they took teacher training.

Teachers with "avant-garde" outlooks do not have to be sought out to institute changes in economic education.

In some quarters there exists the belief that teachers who use new curriculum materials are generally a special breed — young, well-educated, resourceful, highly professional, and decidely original in methodology and outlook. It was naturally interesting to see whether those teachers in the sample who reported using new curriculum materials conformed to the flamboyant stereotype. To qualify as a "new curriculum" teacher, a respondent had to indicate that he participated in a university-based project or that he had developed his own materials and was willing to make a copy of them available.

It was found that new curriculum respondents were not very different from their colleagues. Compared by years of service, semester hours taken in economics, and use of non-text materials, the new and standard curriculum populations were extremely similar. Over-all, if the new curriculum population was different in methodology and outlook, the measure used to identify the traits did not register the fact.

However, one important difference between groups was degree of participation in in-service education. Of the new curriculum teachers, 40.7 per cent had in-service training; only 12.1 per cent of the standard curriculum teachers had participated.

There remains a need to determine how much the good effects of in-service experiences of some teachers can be passed on to other teachers in the same school or system.

It would have been gratifying to discover that teachers who had in-service education were able to spread their new ideas on economic education among their colleagues. Unfortunately, the sample did not lend itself to adequate measurement and manipulation of the necessary variables to properly test the proposition.

However, some comparisons were made on a limited basis. These indicated that the teacher with in-service experience had little, if any, impact on his associates' treatment of economic content. This remained true even when the ratio of teachers in a system with in-service education was increased.

Although this cannot be considered conclusive, such results alone indicate a need for further research.

VII. SUMMARY

In looking back at the data, one unfortunate problem stands out: many teachers do not perceive the economic content implicit in the courses they teach.

This attitude was typified by a comment received from one of the respondents: "I have a minor in economics, a major in history, and a master's degree in business administration. I have taught business for the past 30 years. My course does not have any economic content. Never in my life have I taught economics. We did have such a course taught by another teacher . . ."

This underscores the scope of the problem. Teachers must perceive economics as something more than a subject entirely unrelated to other academic topics and units. A picture of economics as it truly exists — a process that is inextricably woven throughout many other topics, exerting influence in major and minor ways — must be emphasized.

If the majority of teachers is ever going to arrive at the point where they fully perceive economic aspects of their curricula, it will only come about

through sustained, self-conscious efforts by many institutions and groups.

A closer look at the economic content of particular grades and subjects suggests specific problems and areas for action. Table 6, for example, shows that there is a scope and sequence of economic topics which touches all elementary grades. So there already exists a sound base from which to work for improved economic education—if only the effort will be made.

The extensive treatment consumer education receives in a few high school subjects should be noted. However, these subjects are not usually required courses, and a program intended to reach all students would have to take this into account. One unusual practice would be to emphasize consumer education in the eighth grade: teachers seemed to treat consumer economics extensively there, and it would reach more students than any high school course.

The parochial and private schools seemed to present essentially the same picture as the public schools. They had approximately the same problems, weaknesses, and strengths. But grade by grade comparisons which would have given more precise data were not made between public and non-public schools.

This study began with the desire to obtain data which would help provide a sound basis for further program development and research. In some measure, those goals have been achieved. One hopes the baton will be picked up. Economic education for our citizens is too important to be neglected.

VIII. MOVING FORWARD

Dr. Theral T. Herrick, Executive Director, Illinois Council on Economic Education

Although the results of this study indicate that economic education is not, as yet, an important and integral part of the curriculum or of teacher education, this report should not be used in a negative sense to downgrade the schools. In a democracy the curriculum should reflect the will of the people and, in the past, evidently not enough people have cared about having our economy understood and appreciated.

Fortunately, more and more people are becoming concerned about this problem. Therefore, everyone reading this study should use it in a positive sense to help improve economic education in the schools, colleges, and universities.

The Illinois Council on Economic Education is an organization that welcomes your interest, cooperation and financial support. It is a non-profit, independent, educational corporation dedicated to the improvement of economic literacy. The Council is interested specifically in teacher education, the development and distribution of a variety of materials for teachers and students, the establishment of university resource centers throughout the state, research, public information, evaluation and promotion.

This study should provide a sound basis not only for the Illinois Council to move forward effectively with its program, but also for any others interested in improving economic education. For example, we hope that:

- Our universities and colleges will re-evaluate their introductory courses in economics and require some or all prospective teachers to enroll in them.
- School systems will request free copies of Dr. Parker's questionnaires from the Council and conduct their own surveys.
- Local workshops and seminars for teachers will be planned by schools or counties.
- State or regional conferences, workshops, or seminars for teachers will be held by colleges and universities.
- Librarians will use the Council's bibliographies to secure and organize additional materials.
- Schools will establish local study committees.
- School boards will have open meetings on economic education.
- Educational associations will plan special meetings or sectional meetings on economic education at their regular conferences.
- Business, industry, the professions, labor, and agriculture will establish seminars and publish articles on economic education.
- The Office of the State Superintendent of

Public Instruction will increase its emphasis and participation in economic education.

- The state legislature will pass a joint resolution emphasizing the need for economic education in the curriculum.

If we believe that understanding and appreciating our economy is one of the cornerstones of our society, we should act now and not wait until the system is beyond repair, until we have to resort to mandatory legislation, or until we have an economic Sputnik.

Everyone in a democracy should exercise the right to make choices and establish priorities. If these rights are not exercised, they eventually disappear or gravitate to a higher authority. There is still time for you to help make economic education an integral part of the educational program.

The choice is yours!

Illinois Council on Economic Education
1740 Orrington Avenue
Evanston, Illinois 60201

IX. BIBLIOGRAPHY

Barron, Allen E. *A Study of the Status of Economic Education in Michigan Schools (Kindergarten through Grade 12).* Olivet, Mich.: Olivet College, n.d. [1967].

Bolen, W. F. *Economics in New Jersey High Schools.* Upper Montclair, N.J.: New Jersey Council on Economic Education, 1963.

California State Department of Education. *College Preparation for Teaching Economics.* Report and Recommendations of an Advisory Seminar to the California State Department of Education. N.p.: California State Department of Education, 1966.

Clark, Donald M. *A Survey of Economic Education Instructional Practices.* Buffalo, N.Y.: Buffalo State University College Center for Economic Education, 1967. (Mimeographed.)

Conant, James B. *The American High School.* New York: McGraw-Hill Book Company, 1959.

"Consumer Education: Its New Look." *The Bulletin of the National Association of Secondary-School Principals,* LI (October, 1967).

Cornell, Francis G. "Sample Surveys in Education," *Review of Educational Research,* XXIV (December, 1954), pp. 359-374.

Daugherty, Marion. Scope and Sequence Chart. Evanston, Ill.: Illinois Council on Economic Education, n.d. (Mimeographed.)

Dawson, George G. *Nation-Wide Survey of the Economic Education of Teacher-Trainees.* New York: Joint Council on Economic Education, 1967.

———. *Research in Economic Education: A Bibliography.* New York: New York University Center for Economic Education, 1969.

———. (ed.) *Economic Education Experiences of Enterprising Teachers.* Vol. VI. New York: Joint Council on Economic Education, 1969.

Downie, N. M. and Heath, R. W. *Basic Statistical Methods.* 2d ed. New York: Harper & Row, Publishers, 1965.

"Economic Education." *Social Education,* XXX (April, 1966).

"Economic Understanding: Continuing Quest in Secondary Schools." *The Bulletin of the National Association of Secondary School Principals,* XLIX (November, 1965).

Elam, William W. *Consumer Education Survey: Progress Report.* Springfield, Ill.: Office of the Superintendent of Public Instruction, 1968.

Frank, Libby. "My Weekly Reader Re-Read," reviewed in *Changing Education* (Spring, 1969), pp. 60-62.

Gage, N. L. (ed.) *Handbook of Research on Teaching.* Chicago: Rand McNally & Company, 1963.

[Gillies, William.] "A Comparison of the Status of Economics in Nebraska's High Schools, 1963, 1965, and 1966." N.p.: [Nebraska Council on Economic Education], n.d. [1966]. (Mimeographed.)

Hodges, Luther H. "We're Flunking Our Economic ABC's." *Saturday Evening Post,* (March 10, 1962). Quoted in Darcy, Robert L. "Research Needs and Recommendations in Economic Education." Athens, Ohio: Ohio Council on Economic Education, 1964. (Mimeographed.), p. 3.

Li, Jerome C. R. *Statistical Inference.* Vol. I. Ann Arbor, Mich.: Edwards Brothers, Inc., 1964.

McKee, C. W., and Moulton, H. G. *A Survey of Economic Education.* Washington, D.C.: The Brookings Institution, 1951.

Moore, Bessie, Venus, Charles E., and Copeland, Joe B. *The Status of Economic Education in Arkansas Secondary Schools, 1966-67.* N.p.: Arkansas State Council on Economic Education, The Arkansas State Department of Education, and The Industrial Research and Extension Center, University of Arkansas, cooperating, 1967.

National Task Force on Economic Education. *Economic Education in the Schools.* New York: Committee for Economic Development, 1961.

Office of the Superintendent of Public Instruction. *Guidelines for Consumer Education.* Springfield, Ill.: Office of the Superintendent of Public Instruction, 1968.

"Special Issue: Economic Education." *The Councilor,* XXI (March, 1960). Illinois Council for the Social Studies.

APPENDIX VII

JUNIOR HIGH SCHOOL TEST OF ECONOMICS

Directions

1. This is a test to see how much you understand about economics. You should try to do the best you can on it. There are 40 different questions in the test, and each question has four possible answers. You are to read each question carefully and then select the *one* answer you think is the *best* answer to the question. Some questions are very easy, and some questions are very hard, so try to do your best thinking on each one. If you can't decide on a hard question, go on to the rest of the questions and come back to the hard question later.

2. After you read a question carefully and pick the best answer, remember what letter (A, B, C or D) goes with that answer and mark the corresponding space on the answer sheet with a #2 lead pencil. Here is an example:

   1. Chicago is a:
   A. Country.
   B. Mountain.
   C. Ocean.
   D. City.

   On the answer sheet you would find the number 1 and mark it like this:

	A	B	C	D
1.	O	O	O	●

3. Mark only *one* answer for each question. If you change your mind after you have marked an answer, erase the first mark completely and then fill in the answer you want.

DO NOT MAKE ANY MARKS IN THE TEST BOOKLET, AND DO NOT MAKE ANY STRAY MARKS ON THE ANSWER SHEET.

Do not turn the page and begin the test until you are told to do so.

Developed by
The Center for Economic Education
University of Wisconsin at Milwaukee
under the direction of
Dr. Leon Schur

in cooperation with the

Joint Council on Economic Education

1973

1. Which would be the one best way of increasing the amount of goods and services the nation can produce?

   A. Raise everyone's income so that we all have more money to spend.
   B. Have the government take over the factories.
   C. Pass laws to prevent workers from going on strike.
   D. Provide better machinery and more education for workers.

2. If a company is the only maker of bricks in the country, it is:

   A. A competitor.
   B. A monopoly.
   C. An oligopoly.
   D. A metropolis.

3. If a high tariff were placed on steel shipped into the United States:

   A. The price of steel would go down.
   B. Foreigners would buy more goods from the United States.
   C. American reserves of iron ore would last longer.
   D. The price of steel would go up.

4. Mr. Jones has saved some money and used it to buy shares of stock in a brick manufacturing company. He and others who have bought stock own the company. In electing company directors, they have one vote for each share of stock they own. The company is a:

   A. Partnership.
   B. Proprietorship.
   C. Corporation.
   D. Cooperative.

5. The value of the United States dollar depends upon:

   A. How much gold and silver the government owns.
   B. How much it costs to manufacture money.
   C. What is happening to prices on the stock market
   D. How much you can buy with a dollar.

6. If the amount of money circulating in the United States is greatly increased, at a time when there is full employment, what would be most likely to happen?

   A. The prices of many goods and services would rise.
   B. We would all be better off because we could buy more.
   C. The interest rates on loans would immediately increase.
   D. Businesses would try to slow down production.

7. The best measure of economic growth in a country is the change in:

   A. The amount of money in circulation.
   B. The number of automobiles produced.
   C. The size of the national debt.
   D. The amount of goods and services produced.

8. Grassland is a country in which there is very little government ownership of farms and businesses. People may train for jobs and start businesses as best they can. The government does not usually control prices and wages. Grassland is:

   A. Communistic.
   B. Capitalistic.
   C. Socialistic.
   D. Cooperative.

9. Those who believe that people should be taxed according to their ability to pay would be most likely to favor:

   A. An excise tax.
   B. A general sales tax.
   C. A progressive income tax.
   D. A residential property tax.

10. The main reason why American farmers use tractor-drawn farm machinery instead of horses is that:

   A. Tractors last longer than horses.
   B. Tractors give more output per dollar.
   C. Tractors usually go faster than horses.
   D. Horses usually cannot work a whole day.

11. Bushland is a country in which the government owns all the industries and the farms. Production and wages are set by the government. The government provides education, child care and medical care for all the people. Bushland is a:

   A. Market economy.
   B. Mixed economy.
   C. Command economy.
   D. Traditional economy.

12. An important effect of competition in our economy is that:

   A. It guarantees that all workers will have jobs.
   B. It helps keep prices down.
   C. It prevents business from producing too many goods.
   D. It prevents depressions.

13. As more sewage processing plants are built and put into operation, more fertilizer may be produced as a by-product. If that happens, fertilizer will be:

   A. Wanted more.
   B. More expensive.
   C. Less expensive.
   D. Wanted less.

14. If we were importing most of our transistor radios from Japan, an increase in the tariff on all transistor radios imported into the United States probably would:

   A. Make no difference to us because we could get transistor radios from other countries.
   B. Increase the total number of jobs in the economy.
   C. Make us pay more for transistor radios.
   D. Make transistor radios more important to us, because we would probably have to get along without them.

15. According to the "law of supply and demand," if twice as many heads of lettuce were grown this year because of good weather as were grown last year:

   A. The price of lettuce would go up this year.
   B. The supply of lettuce would stay the same this year.
   C. The demand for lettuce would go down this year.
   D. The price of lettuce would go down this year.

16. When Communist China builds a canal entirely with hand labor, we can probably assume that:

   A. Capital is relatively scarce there.
   B. Canals built by hand are better.
   C. Labor is relatively scarce there.
   D. They have an abundance of natural resources.

17. How much a worker earns depends mostly on:

A. Whether or not he belongs to a union.
B. The supply of and demand for his skills.
C. Laws regulating wages.
D. The kind of firm for which he works.

18. Vineland is a country in which the government owns major industries, such as railroads and electric power companies. Private citizens own other industries such as farms and shoe factories. People are paid according to how good a job they have, but the government helps the poor and generally pays for medical care and schooling. Vineland is:

A. Socialistic.
B. Communistic.
C. Capitalistic.
D. Fascistic.

19. The final result of a large decrease in government spending for national defense would probably be:

A. Much unemployment in nondefense industries.
B. Increased production of nondefense goods.
C. An overall economic boom in the nation.
D. An increase in prices within the nation.

20. Inflation can be defined as a period of:

A. Increasing unemployment.
B. Shortage of money.
C. Rising prices.
D. Failing banks.

21. If we wanted to find out whether an increase in wages over a period of time represented an actual increase in living standards, we should look at what has happened to:

A. Gross national product.
B. Consumer prices.
C. The stock market.
D. Government spending.

22. "Scarcity" is an economic problem:

A. Even for wealthy families in the United States.
B. Only for poor families in the United States.
C. For individuals and families, but not for governments or nations.
D. Only for people who live in underdeveloped countries.

23. Most of the money that American businesses receive by selling their products or services is paid as:

A. Profits to the owners of the businesses.
B. Wages and salaries to employees.
C. Rent to property owners.
D. Interest on debts.

24. Which one of the following is likely to cause more people to be out of work?

A. A decrease in taxes.
B. An increase in consumer spending.
C. A decrease in business spending.
D. An increase in government spending.

25. Local governments spend most of the money they take in for:

A. Fire and police protection.
B. Streets and highways.
C. Parks and recreation.
D. Education

26. Which of the following is the most important difference between the economic system of the United States and the economic system of Soviet Russia?

A. Wages and salaries are much more equal in Russia than they are in the United States.
B. The government has nothing to do with the economy in the United States.
C. Most of the factories, farms, and equipment are owned by the government in Russia.
D. The economy of Russia has always grown more slowly than the economy of the United States.

27. "Economic demand" for a product refers to how much of the product:

A. The people are willing and able to buy at each price.
B. The government orders to be made.
C. Is available for sale.
D. The people want, whether they can buy it or not.

28. In a capitalist economic system, such as the United States, who has the most influence in deciding what will be produced?

A. Labor unions.
B. The federal government.
C. Consumers.
D. Businessmen.

29. Over a long period of time a country increased its production of goods and services per person. This was probably due to:

A. An increase in its population.
B. Tariffs which kept out goods from other nations.
C. Conservation of its natural resources.
D. Increased output per worker.

30. There are many different economic systems in the world. Which is the problem they all have in common?

A. People want more than can be produced.
B. Big businesses are too powerful.
C. Labor unions are too powerful.
D. Farmers are producing too much.

31. The best meaning of "gross national product" is:

A. What the private firms of a country produce during one year.
B. Everything bought and sold for money in a country during one year.
C. What a country produces the most of during one year.
D. The total of everything produced in a country during one year.

32. A worker joins a union and lets the union deal with his employer about pay and job conditions. This is the idea of:

A. Collective bargaining.
B. The open shop.
C. Right-to-work laws.
D. The closed shop.

33. One possible cause of inflation is that:

A. More people are out of work than before.
B. People are trying to spend money faster than goods and services are being produced.
C. Many goods and services are being produced, but people are not buying them.
D. The dollar buys more goods and services than at any other time.

34. If practically all our workers have jobs and our industries are operating at full capacity, but we want to increase the production of houses, what must we do?

A. Decrease the production of some other goods.
B. Put more money into circulation.
C. Get people interested in selling their houses.
D. Import building material from foreign countries.

35. The long lines of consumers waiting outside many stores in Russia tell us that many consumer goods there are probably:

A. Priced too low.
B. In great supply.
C. Not in demand.
D. Priced too high.

36. Another company has started to make the same kind of bricks, at about the same cost and in the same area, as Mr. Jones' company. Mr. Jones' company will probably:

A. Hire more workers.
B. Raise the price of its bricks.
C. Make more profit.
D. Sell fewer bricks.

37. During a time of full employment, if a citizen wanted to slow down rising prices in the United States, he should ask the government to:

A. Raise taxes.
B. Increase investment.
C. Make loans.
D. Increase spending.

38. What is the reward of those who take the investment risks in an enterprise?

A. Salaries.
B. Wages.
C. Profits.
D. Rents.

39. One of the reasons a government might reduce taxes is to:

A. Slow down the rate of inflation.
B. Slow down the rapid rise in interest rates.
C. Help finance space exploration and trips to the moon.
D. Increase consumer spending and stimulate the economy.

40. In a market economy such as the United States, most goods and services are produced by:

A. Consumer cooperatives.
B. Profit-making businesses.
C. Government industries.
D. Nonprofit corporations.

NAME_____

"WERE I A WORKER . . ."

General Instructions

1. Give copies to the students.

   I want to find out how you think you would feel if you were a worker. As you look at the pictures, pretend that the worker is you. If you think you would feel very excited about being this worker, place an "X" in the first blank

   Excited X _____ _____ _____ _____ Bored

   If you think you would feel a little excited, place an "X" in the second blank

   Excited _____ X _____ _____ _____ Bored

   If you think you would feel a little bored, place an "X" in the fourth blank

   Excited _____ _____ _____ X _____ Bored

   If you think you would feel very bored, place an "X" in the last blank

   Excited _____ _____ _____ _____ X Bored

   If you aren't sure how you would feel, place an "X" in the middle blank

   Excited _____ _____ X _____ _____ Bored

   Now go on to the second set of terms.

2. If you have any questions please ask. Now look at the form below.

   This is how you would mark the form if you imagined yourself as a singer and felt a little bored, very kind, very clean, a little like a leader, very pleasant, very unselfish, a little upset, a little unimportant, very beautiful and very smart: Were I a singer, I would feel

Excited	_____	_____	_____	X	_____	Bored
Mean	_____	_____	_____	_____	X	Kind
Clean	X	_____	_____	_____	_____	Dirty
A Leader	_____	X	_____	_____	_____	A Follower
Pleasant	X	_____	_____	_____	_____	Unpleasant
Selfish	_____	_____	_____	_____	X	Unselfish
Upset	_____	X	_____	_____	_____	Satisfied
Important	_____	_____	_____	X	_____	Unimportant
Beautiful	X	_____	_____	_____	_____	Ugly
Smart	X	_____	_____	_____	_____	Dumb

3. Any questions? If not, turn the page to the drawing illustrating a Barber. "This is a Barber; how do you think you would feel if you were a Barber?" Mark how you would feel and continue on through the booklet.

_____ WERE I A **BARBER**

I WOULD FEEL . . .

		A	B	C	D	E	
1.	Excited						Bored
2.	Mean						Kind
3.	Clean						Dirty
4.	A Leader						A Follower
5.	Pleasant						Unpleasant
6.	Selfish						Unselfish
7.	Upset						Satisfied
8.	Important						Unimportant
9.	Beautiful						Ugly
10.	Smart						Dumb

2

WERE I A TELEPHONE OPERATOR

2

I WOULD FEEL . . .

		A	B	C	D	E	
11.	Excited						Bored
12.	Mean						Kind
13.	Clean						Dirty
14.	A Leader						A Follower
15.	Pleasant						Unpleasant
16.	Selfish						Unselfish
17.	Upset						Satisfied
18.	Important						Unimportant
19.	Beautiful						Ugly
20.	Smart						Dumb

WERE I A POULTRYMAN

I WOULD FEEL . . .

		A	B	C	D	E	
21.	Excited						Bored
22.	Mean						Kind
23.	Clean						Dirty
24.	A Leader						A Follower
25.	Pleasant						Unpleasant
26.	Selfish						Unselfish
27.	Upset						Satisfied
28.	Important						Unimportant
29.	Beautiful						Ugly
30.	Smart						Dumb

WERE I A TV REPAIRMAN

I WOULD FEEL . . .

		A	B	C	D	E	
31.	Excited						Bored
32.	Mean						Kind
33.	Clean						Dirty
34.	A Leader						A Follower
35.	Pleasant						Unpleasant
36.	Selfish						Unselfish
37.	Upset						Satisfied
38.	Important						Unimportant
39.	Beautiful						Ugly
40.	Smart						Dumb

WERE I A HOSPITAL ATTENDANT

I WOULD FEEL . . .

A B C D E

41. Excited _____ _____ _____ _____ _____ Bored
42. Mean _____ _____ _____ _____ _____ Kind
43. Clean _____ _____ _____ _____ _____ Dirty
44. A Leader _____ _____ _____ _____ _____ A Follower
45. Pleasant _____ _____ _____ _____ _____ Unpleasant
46. Selfish _____ _____ _____ _____ _____ Unselfish
47. Upset _____ _____ _____ _____ _____ Satisfied
48. Important _____ _____ _____ _____ _____ Unimportant
49. Beautiful _____ _____ _____ _____ _____ Ugly
50. Smart _____ _____ _____ _____ _____ Dumb

WERE I A TYPIST

I WOULD FEEL . . .

A B C D E

51. Excited _____ _____ _____ _____ _____ Bored
52. Mean _____ _____ _____ _____ _____ Kind
53. Clean _____ _____ _____ _____ _____ Dirty
54. A Leader _____ _____ _____ _____ _____ A Follower
55. Pleasant _____ _____ _____ _____ _____ Unpleasant
56. Selfish _____ _____ _____ _____ _____ Unselfish
57. Upset _____ _____ _____ _____ _____ Satisfied
58. Important _____ _____ _____ _____ _____ Unimportant
59. Beautiful _____ _____ _____ _____ _____ Ugly
60. Smart _____ _____ _____ _____ _____ Dumb

WERE I A STORE OWNER

I WOULD FEEL . . .

		A	B	C	D	E	
61.	Excited						Bored
62.	Mean						Kind
63.	Clean						Dirty
64.	A Leader						A Follower
65.	Pleasant						Unpleasant
66.	Selfish						Unselfish
67.	Upset						Satisfied
68.	Important						Unimportant
69.	Beautiful						Ugly
70.	Smart						Dumb

91

WERE I A WAITRESS

I WOULD FEEL . . .

		A	B	C	D	E	
71.	Excited						Bored
72.	Mean						Kind
73.	Clean						Dirty
74.	A Leader						A Follower
75.	Pleasant						Unpleasant
76.	Selfish						Unselfish
77.	Upset						Satisfied
78.	Important						Unimportant
79.	Beautiful						Ugly
80.	Smart						Dumb

92

WERE I AN ARCHITECT

I WOULD FEEL . . .

		A	B	C	D	E	
81.	Excited						Bored
82.	Mean						Kind
83.	Clean						Dirty
84.	A Leader						A Follower
85.	Pleasant						Unpleasant
86.	Selfish						Unselfish
87.	Upset						Satisfied
88.	Important						Unimportant
89.	Beautiful						Ugly
90.	Smart						Dumb

93

WERE I THE GOVERNOR

I WOULD FEEL . . .

		A	B	C	D	E	
91.	Excited						Bored
92.	Mean						Kind
93.	Clean						Dirty
94.	A Leader						A Follower
95.	Pleasant						Unpleasant
96.	Selfish						Unselfish
97.	Upset						Satisfied
98.	Important						Unimportant
99.	Beautiful						Ugly
100.	Smart						Dumb

WERE I A CARTOONIST

I WOULD FEEL . . .

A B C D E

101.	Excited	Bored
102.	Mean	Kind
103.	Clean	Dirty
104.	A Leader	A Follower
105.	Pleasant	Unpleasant
106.	Selfish	Unselfish
107.	Upset	Satisfied
108.	Important	Unimportant
109.	Beautiful	Ugly
110.	Smart	Dumb

WERE I AN INSURANCE SALESMAN

I WOULD FEEL . . .

A B C D E

111.	Excited	Bored
112.	Mean	Kind
113.	Clean	Dirty
114.	A Leader	A Follower
115.	Pleasant	Unpleasant
116.	Selfish	Unselfish
117.	Upset	Satisfied
118.	Important	Unimportant

App. IX

W O W E E

Test Booklet

Do not mark on this booklet - Follow teacher instruction

Illinois Council on Economic Education

W.O.W.E.E.

TEST OF ECONOMICS

ILLINOIS COUNCIL ON ECONOMIC EDUCATION
NORTHERN ILLINOIS UNIVERSITY
627 W. LINCOLN HIGHWAY
DEKALB, ILLINOIS 60115

Directions

1. This is a test to see how much you understand about economics. You should try to do the best you can on it. There are 40 different questions in the test, and each question has four possible answers. You are to read each question carefully and then select the *one* answer you think is the *best* answer to the question. Some questions are very easy, and some questions are very hard, so try to do your best thinking on each one. If you can't decide on a hard question, go on to the rest of the questions and come back to the hard question later.

2. After you read a question carefully and pick the best answer, remember what letter (A, B, C or D) goes with that answer and mark the corresponding space on the answer sheet with a #2 lead pencil. Here is an example:

   1. Chicago is a:
   A. Country.
   B. Mountain.
   C. Ocean.
   D. City.

   On the answer sheet you would find the number 1 and mark it like this:

	A	B	C	D
1.	O	O	O	●

3. Mark only *one* answer for each question. If you change your mind after you have marked an answer, erase the first mark completely and then fill in the answer you want.

DO NOT MAKE ANY MARKS IN THE TEST BOOKLET, AND DO NOT MAKE ANY STRAY MARKS ON THE ANSWER SHEET.

Do not turn the page and begin the test until you are told to do so.

Developed by
The Center for Economic Education
University of Wisconsin at Milwaukee
under the direction of
Dr. Leon Schur

in cooperation with the

Joint Council on Economic Education

1973

1. Which would be the one best way of increasing the amount of goods and services the nation can produce?

   A. Raise everyone's income so that we all have more money to spend.
   B. Have the government take over the factories.
   C. Pass laws to prevent workers from going on strike.
   D. Provide better machinery and more education for workers.

2. If a company is the only maker of bricks in the country, it is:

   A. A competitor.
   B. A monopoly.
   C. An oligopoly.
   D. A metropolis.

3. If a high tariff were placed on steel shipped into the United States:

   A. The price of steel would go down.
   B. Foreigners would buy more goods from the United States.
   C. American reserves of iron ore would last longer.
   D. The price of steel would go up.

4. Mr. Jones has saved some money and used it to buy shares of stock in a brick manufacturing company. He and others who have bought stock own the company. In electing company directors, they have one vote for each share of stock they own. The company is a:

   A. Partnership.
   B. Proprietorship.
   C. Corporation.
   D. Cooperative.

5. The value of the United States dollar depends upon:

   A. How much gold and silver the government owns.
   B. How much it costs to manufacture money.
   C. What is happening to prices on the stock market.
   D. How much you can buy with a dollar.

6. If the amount of money circulating in the United States is greatly increased, at a time when there is full employment, what would be most likely to happen?

   A. The prices of many goods and services would rise.
   B. We would all be better off because we could buy more.
   C. The interest rates on loans would immediately increase.
   D. Businesses would try to slow down production.

7. The best measure of economic growth in a country is the change in:

   A. The amount of money in circulation.
   B. The number of automobiles produced.
   C. The size of the national debt.
   D. The amount of goods and services produced.

8. Grassland is a country in which there is very little government ownership of farms and businesses. People may train for jobs and start businesses as best they can. The government does not usually control prices and wages. Grassland is:

   A. Communistic.
   B. Capitalistic.
   C. Socialistic.
   D. Cooperative.

9. Those who believe that people should be taxed according to their ability to pay would be most likely to favor:

   A. An excise tax.
   B. A general sales tax.
   C. A progressive income tax.
   D. A residential property tax.

10. The main reason why American farmers use tractor-drawn farm machinery instead of horses is that:

   A. Tractors last longer than horses.
   B. Tractors give more output per dollar.
   C. Tractors usually go faster than horses.
   D. Horses usually cannot work a whole day.

11. Bushland is a country in which the government owns all the industries and the farms. Production and wages are set by the government. The government provides education, child care and medical care for all the people. Bushland is a:

   A. Market economy.
   B. Mixed economy.
   C. Command economy.
   D. Traditional economy.

12. An important effect of competition in our economy is that:

   A. It guarantees that all workers will have jobs.
   B. It helps keep prices down.
   C. It prevents business from producing too many goods.
   D. It prevents depressions.

13. As more sewage processing plants are built and put into operation, more fertilizer may be produced as a by-product. If that happens, fertilizer will be:

   A. Wanted more.
   B. More expensive.
   C. Less expensive.
   D. Wanted less.

14. If we were importing most of our transistor radios from Japan, an increase in the tariff on all transistor radios imported into the United States probably would:

   A. Make no difference to us because we could get transistor radios from other countries.
   B. Increase the total number of jobs in the economy.
   C. Make us pay more for transistor radios.
   D. Make transistor radios more important to us, because we would probably have to get along without them.

15. According to the "law of supply and demand," if twice as many heads of lettuce were grown this year because of good weather as were grown last year:

   A. The price of lettuce would go up this year.
   B. The supply of lettuce would stay the same this year.
   C. The demand for lettuce would go down this year.
   D. The price of lettuce would go down this year.

16. When Communist China builds a canal entirely with hand labor, we can probably assume that:

   A. Capital is relatively scarce there.
   B. Canals built by hand are better.
   C. Labor is relatively scarce there.
   D. They have an abundance of natural resources.

17. How much a worker earns depends mostly on:

A. Whether or not he belongs to a union.
B. The supply of and demand for his skills.
C. Laws regulating wages.
D. The kind of firm for which he works.

18. Vineland is a country in which the government owns major industries, such as railroads and electric power companies. Private citizens own other industries such as farms and shoe factories. People are paid according to how good a job they have, but the government helps the poor and generally pays for medical care and schooling. Vineland is:

A. Socialistic.
B. Communistic.
C. Capitalistic.
D. Fascistic.

19. The final result of a large decrease in government spending for national defense would probably be:

A. Much unemployment in nondefense industries.
B. Increased production of nondefense goods.
C. An overall economic boom in the nation.
D. An increase in prices within the nation.

20. Inflation can be defined as a period of:

A. Increasing unemployment.
B. Shortage of money.
C. Rising prices.
D. Failing banks.

21. If we wanted to find out whether an increase in wages over a period of time represented an actual increase in living standards, we should look at what has happened to:

A. Gross national product.
B. Consumer prices.
C. The stock market.
D. Government spending.

22. "Scarcity" is an economic problem:

A. Even for wealthy families in the United States.
B. Only for poor families in the United States.
C. For individuals and families, but not for governments or nations.
D. Only for people who live in underdeveloped countries.

23. Most of the money that American businesses receive by selling their products or services is paid as:

A. Profits to the owners of the businesses.
B. Wages and salaries to employees.
C. Rent to property owners.
D. Interest on debts.

24. Which one of the following is likely to cause more people to be out of work?

A. A decrease in taxes.
B. An increase in consumer spending.
C. A decrease in business spending.
D. An increase in government spending.

25. Local governments spend most of the money they take in for:

A. Fire and police protection.
B. Streets and highways.
C. Parks and recreation.
D. Education

26. Which of the following is the most important difference between the economic system of the United States and the economic system of Soviet Russia?

A. Wages and salaries are much more equal in Russia than they are in the United States.
B. The government has nothing to do with the economy in the United States.
C. Most of the factories, farms, and equipment are owned by the government in Russia.
D. The economy of Russia has always grown more slowly than the economy of the United States.

27. "Economic demand" for a product refers to how much of the product:

A. The people are willing and able to buy at each price.
B. The government orders to be made.
C. Is available for sale.
D. The people want, whether they can buy it or not.

28. In a capitalist economic system, such as the United States, who has the most influence in deciding what will be produced?

A. Labor unions.
B. The federal government.
C. Consumers.
D. Businessmen.

29. Over a long period of time a country increased its production of goods and services per person. This was probably due to:

A. An increase in its population.
B. Tariffs which kept out goods from other nations.
C. Conservation of its natural resources.
D. Increased output per worker.

30. There are many different economic systems in the world. Which is the problem they all have in common?

A. People want more than can be produced.
B. Big businesses are too powerful.
C. Labor unions are too powerful.
D. Farmers are producing too much.

31. The best meaning of "gross national product" is:

A. What the private firms of a country produce during one year.
B. Everything bought and sold for money in a country during one year.
C. What a country produces the most of during one year.
D. The total of everything produced in a country during one year.

32. A worker joins a union and lets the union deal with his employer about pay and job conditions. This is the idea of:

A. Collective bargaining.
B. The open shop.
C. Right-to-work laws.
D. The closed shop.

33. One possible cause of inflation is that:

A. More people are out of work than before.
B. People are trying to spend money faster than goods and services are being produced.
C. Many goods and services are being produced, but people are not buying them.
D. The dollar buys more goods and services than at any other time.

34. If practically all our workers have jobs and our industries are operating at full capacity, but we want to increase the production of houses, what must we do?

A. Decrease the production of some other goods.
B. Put more money into circulation.
C. Get people interested in selling their houses.
D. Import building material from foreign countries.

35. The long lines of consumers waiting outside many stores in Russia tell us that many consumer goods there are probably:

A. Priced too low.
B. In great supply.
C. Not in demand.
D. Priced too high.

36. Another company has started to make the same kind of bricks, at about the same cost and in the same area, as Mr. Jones' company. Mr. Jones' company will probably:

A. Hire more workers.
B. Raise the price of its bricks.
C. Make more profit.
D. Sell fewer bricks.

37. During a time of full employment, if a citizen wanted to slow down rising prices in the United States, he should ask the government to:

A. Raise taxes.
B. Increase investment.
C. Make loans.
D. Increase spending.

38. What is the reward of those who take the investment risks in an enterprise?

A. Salaries.
B. Wages.
C. Profits.
D. Rents.

39. One of the reasons a government might reduce taxes is to:

A. Slow down the rate of inflation.
B. Slow down the rapid rise in interest rates.
C. Help finance space exploration and trips to the moon.
D. Increase consumer spending and stimulate the economy.

40. In a market economy such as the United States, most goods and services are produced by:

A. Consumer cooperatives.
B. Profit-making businesses.
C. Government industries.
D. Nonprofit corporations.

"WERE I A WORKER . . ."

General Instructions

1. I want to find out how you think you would feel if you were a worker. As you read the title, pretend you are that worker. If you think you would feel very dissatisfied if you were that worker, fill in the letter (A) on the answer sheet.

   Dissatisfied (A) (B) (C) (D) (E) Satisfied

   If you think you would feel a little dissatisfied, fill in the letter (B) on the answer sheet.

   Dissatisfied (A) (B) (C) (D) (E) Satisfied

   If you think you would feel a little satisfied, fill in the letter (D) on the answer sheet.

   Dissatisfied (A) (B) (C) (D) (E) Satisfied

   If you think you would feel very satisfied fill in the letter (E) on the answer sheet.

   Dissatisfied (A) (B) (C) (D) (E) Satisfied

   If you aren't sure how you would feel, fill in the letter (C) on the answer sheet.

   Dissatisfied (A) (B) (C) (D) (E) Satisfied

   Now go on to the second set of terms.

2. This is how you would mark the form if you imagined yourself as a Singer and felt a little interesting, very valuable, very much a leader, a little pleasant, very unselfish, very dissatisfied, very important, and a little rich. If I were a Singer, I would feel

Uninteresting	(A)	(B)	(C)	●	(E)	Interesting
Valuable	●	(B)	(C)	(D)	(E)	Useless
A Leader	●	(B)	(C)	(D)	(E)	A Follower
Pleasant	(A)	●	(C)	(D)	(E)	Unpleasant
Selfish	(A)	(B)	(C)	(D)	●	Unselfish
Dissatisfied	●	(B)	(C)	(D)	(E)	Satisfied
Important	●	(B)	(C)	(D)	(E)	Unimportant
Rich	(A)	●	(C)	(D)	(E)	Poor

3. Any questions? If not, turn to the next page. "This is a Medical Doctor; how do you think you would feel if you were a Medical Doctor?" Mark how you would feel and continue on through the booklet.

DO NOT WRITE IN THIS BOOKLET, USE THE ANSWER SHEET

IF I WERE A

MEDICAL DOCTOR

I WOULD FEEL . . .

1.	Uninteresting	(A)	(B)	C	D	E	Interesting
2.	Valuable	A	B	C	D	E	Useless
3.	A Leader	A	B	C	D	E	A Follower
4.	Pleasant	A	B	C	D	E	Unpleasant
5.	Selfish	A	B	C	D	E	Unselfish
6.	Dissatisfied	A	B	C	D	E	Satisfied
7.	Important	A	B	C	D	E	Unimportant
8.	Rich	A	B	C	D	E	Poor

IF I WERE A

FARMER

I WOULD FEEL . . .

9.	Uninteresting	A	B	C	D	E	Interesting
10.	Valuable	A	B	C	D	E	Useless
11.	A Leader	A	B	C	D	E	A Follower
12.	Pleasant	A	B	C	D	E	Unpleasant
13.	Selfish	A	B	C	D	E	Unselfish
14.	Dissatisfied	A	B	C	D	E	Satisfied
15.	Important	A	B	C	D	E	Unimportant
16.	Rich	A	B	C	D	E	Poor

DO NOT WRITE IN THIS BOOKLET, USE THE ANSWER SHEET

IF I WERE A

SALES CLERK

I WOULD FEEL . . .

17.	Uninteresting	(A)	(B)	(C)	(D)	(E)	Interesting
18.	Valuable	(A)	(B)	(C)	(D)	(E)	Useless
19.	A Leader	(A)	(B)	(C)	(D)	(E)	A Follower
20.	Pleasant	(A)	(B)	(C)	(D)	(E)	Unpleasant
21.	Selfish	(A)	(B)	(C)	(D)	(E)	Unselfish
22.	Dissatisfied	(A)	(B)	(C)	(D)	(E)	Satisfied
23.	Important	(A)	(B)	(C)	(D)	(E)	Unimportant
24.	Rich	(A)	(B)	(C)	(D)	(E)	Poor

IF I WERE A

CARPENTER

I WOULD FEEL . . .

25.	Uninteresting	(A)	(B)	(C)	(D)	(E)	Interesting
26.	Valuable	(A)	(B)	(C)	(D)	(E)	Useless
27.	A Leader	(A)	(B)	(C)	(D)	(E)	A Follower
28.	Pleasant	(A)	(B)	(C)	(D)	(E)	Unpleasant
29.	Selfish	(A)	(B)	(C)	(D)	(E)	Unselfish
30.	Dissatisfied	(A)	(B)	(C)	(D)	(E)	Satisfied
31.	Important	(A)	(B)	(C)	(D)	(E)	Unimportant
32.	Rich	(A)	(B)	(C)	(D)	(E)	Poor

DO NOT WRITE IN THIS BOOKLET, USE THE ANSWER SHEET

IF I WERE A

T. V. REPAIRER

I WOULD FEEL . . .

33.	Uninteresting	(A)	(B)	(C)	(D)	(E)	Interesting
34.	Valuable	(A)	(B)	(C)	(D)	(E)	Useless
35.	A Leader	(A)	(B)	(C)	(D)	(E)	A Follower
36.	Pleasant	(A)	(B)	(C)	(D)	(E)	Unpleasant
37.	Selfish	(A)	(B)	(C)	(D)	(E)	Unselfish
38.	Dissatisfied	(A)	(B)	(C)	(D)	(E)	Satisfied
39.	Important	(A)	(B)	(C)	(D)	(E)	Unimportant
40.	Rich	(A)	(B)	(C)	(D)	(E)	Poor

APPENDIX X

COGNITIVE GAINS AS A RESULT OF EXPOSURE
TO ILLINOIS "WOWEE" PROGRAM
1974-5 DATA

TABLE 1: National and WOWEE Pretest Statistics

	National Sample	WOWEE Sample
$\bar{X}$	19.12	18.33
σ	6.17	6.34
n	8,618	1,733
grades	9	5 - 9

TABLE 2: WOWEE Group Pretest Statistics

	Experimental	Control
$\bar{X}$	18.31	18.40
σ	6.26	6.51
n	1,211	522

TABLE 3: WOWEE Group Posttest Statistics

	Experimental	Control
$\bar{X}$	21.68	19.79
σ	9.62	6.92
n	1.209	522

TABLE 4: Regression Estimates of Student Cognitive Achievements[1]

(Posttest Score = dependent variable; N = 1,446)

Variable	Regression Coefficient	Beta Coefficient	T-ratio
Control-experimental (C = 1, X = 0)	-2.079	-0.135	7.04 **
Teacher Sex (M = 1, F = 0)	0.475	0.032	1.41
Pretest Score	0.763	0.675	33.14 **
Student Sex (M = 1, F = 0)	0.142	0.010	0.54
District vars.			
D_1	1.991	0.083	3.49 **
D_2	2.721	0.127	5.07 **
D_3	-0.560	-0.021	0.93
D_4	3.520	0.013	0.72
D_5	3.798	0.105	4.85 **
D_6	0.788	0.034	1.43
D_7	-2.221	-0.053	2.59 **
D_8	1.960	0.078	3.63 **
D_9	0.812	0.008	0.43
D_{10}	-5.228	-0.064	3.35 **
D_{11}	1.050	0.053	2.00 *
D_{12}	-0.370	-0.012	0.57
D_{13}	-0.402	-0.010	0.50
D_{14}	-0.076	-0.003	0.12
Constant	6.347		

$\bar{R}^2$ = 0.5315 S.E.E. = 4.84 F = 91.97 ** (d.f. = 1427 and 18)

*Significant at the 0.05 level
**Significant at the 0.01 level

[1]Source: John C. Soper, "Needs for Evaluation in Economic Education" in Proceedings of the National Conference on Needed Research and Development in Pre-College Economic Education, W. Lee Hansen and Donald R. Wentworth, eds., (forthcoming).